VDOİHİ

Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Bağımlı Durumlu Simetrinin Herhangi İki Durumuna Bağlı Tek Kalan Düzgün Olmayan Simetrik Olasılık

Cilt 2.3.3.3.4.1.1.11

İsmail YILMAZ

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VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin herhangi iki durumuna bağlı tek kalan düzgün olmayan simetrik olasılık Cilt 2.3.3.3.4.1.1.11

İsmail YILMAZ

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1. Bağımlı durumlu simetrinin herhangi iki durumuna bağlı tek kalan düzgün olmayan simetrik olasılık

Dili: Türkçe + Matematik Mantık

Türkiye Cumhuriyeti Devleti
Kuruluşunun
100.Yılı Anısına

M. Atatürk

DÜZELTME

Bu cilt için

$_{fz}S_{j_{ik},j^{sa}}$

simgesi yerine

$_{fz}S^{DOST}_{j_{ik},j^{sa}}$

simgesi olmalı.

d

Yazar Hakkında

İsmail YILMAZ; Hamzabey Köyü, Yeniçağa, Bolu'da 1973 yılında doğdu. İlkokulu köyünde tamamladıktan sonra, ortaokulu Yeniçağa ortaokulunda tamamladı. Liseyi Ankara Ömer Seyfettin ve Gazi Çiftliği Liselerinde okudu. Lisans eğitimini Çukurova Üniversitesi Fen Edebiyat Fakültesi Fizik bölümünde, yüksek lisans eğitimini Sakarya Üniversitesi Fen Bilimleri Enstitüsü Fizik Anabilim Dalında ve doktora eğitimini Gazi Üniversitesi Eğitim Bilimleri Enstitüsü Fen Bilgisi Eğitimi Anabilim Dalında tamamladı. Fen Bilgisi Eğitiminde; Newton'un hareket yasaları, elektrik ve manyetizmanın prosedürel ve deklaritif bilgi yapılarıyla birlikte matematik mantık yapıları üzerine çalışmalar yapmıştır. Yazarın farklı alanlarda yapmış olduğu çalışmalar arasında ölçme ve değerlendirmeye yönelik çalışmaları da mevcuttur.

VDOİHİ

Veri **D**eğişkenleri **O**lasılık ve **İ**htimal **H**esaplama **İ**statistiği (VDOİHİ) ile olasılık ve ihtimal yasa konumuna getirilmiştir.

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- ✓ Makinaların insan gibi düşünebilmesini, karar verebilmesini ve davranabilmesini sağlayacak gerçek yapay zekayla ilişkilendirilmiştir.
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- ✓ Teorik kabullerle genetikle ilişkilendirilmiştir.
- ✓ Bilgi merkezli değerlendirme yöntemidir.

Sanırım bilgi ve teknolojideki kaderimiz veriyle ilişkilendirilmiş.

f

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GÜLDÜNYA

Simge ve Kısaltmalar

n: olay sayısı

$\boldsymbol{n}$: bağımlı olay sayısı

$\mathbb{m}$: bağımsız olay sayısı

$\imath$: bağımsız durum sayısı

I: simetrinin bağımsız durum sayısı

$\mathbb{l}$: simetrinin bağımlı durumlarından önce bulunan bağımsız durum sayısı

$\boldsymbol{I}$: simetrinin bağımlı durumlarından sonra bulunan bağımsız durum sayısı

$\mathbb{k}$: simetrinin bağımlı durumları arasındaki bağımsız durumların sayısı

k: dağılımın başladığı bağımlı durumun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası

$\boldsymbol{l}$: ilgilenilen bağımlı durumun, bağımlı olasılıklı farklı dizilimsiz dağılımlarındaki sırası

$_{\boldsymbol{i}}\boldsymbol{l}$: simetrinin ilk bağımlı durumunun, bağımlı olasılık farklı dizilimsiz dağılımın son olayı için sırası. Simetrinin sonuncu bağımlı olayındaki durumun, bağımlı olasılık farklı dizilimsiz dağılımlarındaki sırası

$\boldsymbol{l_i}$: simetrinin son bağımlı durumunun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası. Simetrinin birinci bağımlı olayındaki durumun, bağımlı olasılık farklı dizilimsiz dağılımlarındaki sırası

$\boldsymbol{l_s}$: simetrinin ilk bağımlı durumunun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası. Simetrinin sonuncu bağımlı olayındaki durumun, bağımlı olasılık farklı dizilimsiz dağılımlarındaki sırası

$\boldsymbol{l_{ik}}$: simetrinin aranacağı durumdan önce bulunan bağımlı durumun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası veya simetrinin iki bağımlı durumu arasında bağımsız durum bulunduğunda, bağımsız durumdan önceki bağımlı durumun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası

$\boldsymbol{l_{sa}}$: simetrinin aranacağı bağımlı durumunun, bağımlı olasılıklı farklı dizilimsiz dağılımlardaki sırası. Simetrinin aranacağı bağımlı olayındaki durumun, bağımlı olasılık farklı dizilimsiz dağılımlarındaki sırası

j: son olaydan/(alt olay) ilk olaya doğru aranılan olayın sırası

j_i: simetrinin son bağımlı durumunun, bağımlı olasılıklı dağılımlarda bulunabileceği olayların, son olaydan itibaren sırası

j_{sa}^{i}: simetriyi oluşturan bağımlı durumlar arasında simetrinin son bağımlı durumunun bulunduğu olayın, simetrinin son olayından itibaren sırası $\left(j_{sa}^{i} = s\right)$

j_{ik}: simetrinin ikinci olayındaki durumun, gelebileceği olasılık dağılımlarındaki olayın sırası (son olaydan ilk olaya doğru) veya simetride, simetrinin aranacağı durumdan önce bulunan bağımlı durumun, bağımlı olasılıklı dağılımlarda bulunabileceği olayların, son olaydan itibaren sırası veya simetrinin iki bağımlı

durum arasında bağımsız durumun bulunduğunda bağımsız durumdan önceki bağımlı durumun bağımlı olasılıklı dağılımlarda bulunabileceği olayların son olaydan itibaren sırası

j_{sa}^{ik}: j_{ik}'da bulunan durumun simetriyi oluşturan bağımlı durumlar arasında bulunduğu olayın son olaydan itibaren sırası

$j_{X_{ik}}$: simetrinin ikinci olayındaki durumun, olasılık dağılımlarının son olaydan itibaren bulunabileceği olayın sırası

j_s: simetrinin ilk bağımlı durumunun, bağımlı olasılıklı dağılımlarda bulunabileceği olayların, son olaydan itibaren sırası

j_{sa}^{s}: simetriyi oluşturan bağımlı durumlar arasında simetrinin ilk bağımlı durumunun bulunduğu olayın, simetrinin son olayından itibaren sırası ($j_{sa}^{s} = 1$)

j_{sa}: simetriyi oluşturan bağımlı durumlar arasında simetrinin aranacağı durumun bulunduğu olayın, simetrinin son olayından itibaren sırası

j^{sa}: j_{sa}'da bulunan durumun bağımlı olasılıklı dağılımda bulunduğu olayın son olaydan itibaren sırası

D: bağımlı durum sayısı

D_i: olayın durum sayısı

s: simetrinin bağımlı durum sayısı

$\boldsymbol{s}$: simetrik durum sayısı. Simetrinin bağımlı ve bağımsız durum sayısı

m: olasılık

M: olasılık dağılım sayısı

U: uyum eşitliği

u: uyum derecesi

s_i: olasılık dağılımı

${}_{fz}S_{j_i}^{DST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin son durumunun bulunabileceği olaylara göre tek kalan simetrik olasılık

${}_{fz}S_{j_i,0}^{DST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre tek kalan simetrik olasılık

${}_{fz}S_{j_i,D}^{DST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre tek kalan simetrik olasılık

${}_{fz}^{0}S_{j_i}^{DST}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız durumlu simetrinin son durumunun bulunabileceği olaylara göre tek kalan simetrik olasılık

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durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık

$_{fz,0}S^{DOST}_{j_s,j_{ik},j^{sa},j_i,0}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık

$_{fz,0}S^{DOST}_{j_s,j_{ik},j^{sa},j_i,D}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık

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E2

BAĞIMLI ve BİR BAĞIMSIZ OLASILIKLI FARKLI DİZİLİMSİZ DAĞILIMLAR

Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Dağılımlar

- **Simetrik Olasılık**
- **Toplam Düzgün Simetrik Olasılık**
- **Toplam Düzgün Olmayan Simetrik Olasılık**
- **İlk Simetrik Olasılık**
- **İlk Düzgün Simetrik Olasılık**
- **İlk Düzgün Olmayan Simetrik Olasılık**
- **Tek Kalan Simetrik Olasılık**
- **Tek Kalan Düzgün Simetrik Olasılık**
- **Tek Kalan Düzgün Olmayan Simetrik Olasılık**
- **Kalan Simetrik Olasılık**
- **Kalan Düzgün Simetrik Olasılık**
- **Kalan Düzgün Olmayan Simetrik Olasılık**

Bağımlı dağılım ve bir bağımsız olasılıklı durumla oluşturulabilen dağılımlara ve bağımlı olasılıklı dağılımların kendi olay sayılarından (bağımlı olay sayısı) büyük olanlara (bağımlı olay sayısı) dağılımıyla bağımlı ve bir bağımsız olasılıklı dağılımlar denir. Bağımlı dağılım farklı dizilimsiz dağılımlara uygulandığında, bu dağılımlara bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlar denir. Bağımlı ve bir bağımsız olasılıklı dağılımlar; bağımlı dağılımlara, bağımsız durumlar ilk paydan dağıtılmaya başlanarak tabloları elde edilir. Bu bölümde verilen eşitlikler, bu yöntemle elde edilen kurallı tablolara göre verilmektedir. Farklı dizilimsiz dağılımlarda durumların küçükten-büyüğe sıralanmasıyla elde edilebilen kurallı tablolar kullanılmaktadır. Farklı dizilimsiz dağılımlarda durumların küçükten-büyüğe sıralama için verilen eşitliklerde kullanılan durum sayılarının düzenlenmesiyle, büyükten-küçüğe sıralama durumlarının eşitlikleri elde edilebilir.

Farklı dizilimsiz dağılımlar, dağılımın ilk durumuyla başlayan (bunun yerine farklı dizilimli dağılımlarda simetrinin ilk durumuyla başlayan dağılımlar), dağılımın ilk durumu hariçinde dağılımın herhangi bir durumuyla başlayan dağılımlar (bunun yerine farklı dizilimli dağılımlarda simetride bulunmayan bir durumla başlayan dağılımlar) ve dağılımın ilk durumu özgün olarak dağılımının başladığı farklı ikinci durumla başlayıp simetrinin ilk durumuyla başlayan dağılımların sonuna kadar olan dağılımlarda (bunun yerine farklı dizilimli dağılımlarda simetride bulunmayan diğer durumlarla başlayan dağılımlar) simetrik, düzgün simetrik, düzgün olmayan simetrik v.d. incelenir. Bağımlı dağılımlardaki incelenen başlıklar, bağımlı ve bir bağımsız olasılıklı dağılımlarda, bağımsız durumla ve bağımlı durumla başlayan dağılımlar olarak da incelenir.

GÜDÜMYA

Bağımlı dağılımlar; a) olasılık dağılımlardaki simetrik, (toplam) düzgün simetrik ve (toplam) düzgün olmayan simetrik b) ilk simetrik, ilk düzgün simetrik ve ilk düzgün olmayan simetrik c) tek kalan simetrik, tek kalan düzgün simetrik ve tek kalan düzgün olmayan simetrik ve d) kalan simetrik, kalan düzgün simetrik ve kalan düzgün olmayan simetrik olasılıklar olarak incelendiğinden, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlarda bu başlıklarla incelenmekle birlikte, bu simetrik olasılıkların bağımsız durumla başlayan ve bağımlı durumlarıyla başlayan dağılımlara göre de tanım[illegible] eşitlikleri verilmektedir.

Farklı dizilimsiz dağılımlarda simetrinin durumlarının olasılık dağılımındaki sıra[illegible] simetrik olasılıkları etkilediğinden, bu bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımları da etkiler. Bu nedenle bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlarda, simetrinin durumlarının bulunabileceği olaylara göre simetrik olasılık eşitlikleri, simetrinin durumlarının olasılık dağılımındaki sıralamalarına göre ayrı ayrı verilecektir. Bu eşitliklerin elde edilmesinde bağımlı olasılıklı farklı dizilimsiz dağılımlarda simetrinin durumların bulunabileceği olaylara göre çıkarılan eşitlikler kullanılacaktır. Bu eşitlikler, bir bağımlı ve bir bağımsız olasılıklı dağılımlar için VDO Ği Cilt [illegible]'de çıkarılan eşitliklerle birleştirilerek, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlar için yeni eşitlikleri elde edilecektir. Eşitlikleri adlandırılmasında bağımlı olasılıklı farklı dizilimsiz dağılımlarda kullanılan adlandırmalar kullanılacaktır. Bu adların [illegible]na simetrinin bağımlı ve bağımsız durumlarına göre ve dağılımın bağımsız veya bağımlı durumla başlamasına göre "Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı/bağımsız-bağımlı/bağımlı-bir bağımsız/bağımlı-bağımsız/bağımsız-bağımsız durumlu/bağımsız/bağımlı" kelimeleri getirilerek, simetrinin bağımlı durumlarının bulunabileceği olaylara göre bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz adları verilecektir. Simetriden seçilen durumların bulunabileceği olaylara göre simetrik, düzgün simetrik veya düzgün olmayan simetrik olasılık için birden fazla eşitlik kullanılması durumunda gerekmedikçe yeni tanımlama yapılmayacaktır.

Simetrinin durumlarının bağımlı olasılık farklı dizilimsiz dağılımlarındaki sırasına göre verilen eşitliklerdeki toplam alma sınır değerleri, simetrinin küçükten-büyüğe sıralanan dağılımlarına göre verildiğinden bu dağılımlarda da aynı sıralama kullanılmaya devam edilecektir. Bağımlı olasılıklı farklı dizilimsiz dağılımlarda olduğu gibi bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlarda da aynı eşitliklerde simetrinin durum sayıları düzenlenerek büyükten küçüğe sıralanan dağılımlar için de simetrik olasılık eşitlikleri elde edilir.

Bu [illegible]tte bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımın ilk bağımlı durumu olan dağılımın başlayabileceği diğer bir bağımlı durum olan ve bağımsız olasılıklı durumla başlayan dağılımın aynı ilk bağımlı durumuyla başlayan dağılımlarda, simetrinin herhangi iki durumuna bağlı tek kalan düzgün olmayan simetrik olasılığın eşitlikleri verilmektedir.

GÜLDÜNYA

SİMETRİDEN SEÇİLEN İKİ DURUMA GÖRE TEK KALAN DÜZGÜN OLMAYAN SİMETRİK OLASILIK

$$
\begin{aligned}
&\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge \\
&2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge \\
&j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge \\
&j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge \\
&\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}\big) \vee \\
&(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge \\
&2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge \\
&j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge \\
&j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge \\
&\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}\big) \\
&D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge \\
&j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - \cdots j_{sa}^{s} \leq j_{sa}^{ik} - \cdots \\
&\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2 \cdots_{sa}, \cdots, j_{sa}^{i}\} \wedge \\
&s \geq 4 \wedge \boldsymbol{s} = \cdots + \mathbb{k} \wedge \\
&\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \cdots + \mathbb{k}_2 = \cdots
\end{aligned}
$$

$$
{}_{fz}S_{j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1} \sum_{j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D} \right.
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\left. \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \right.
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\ \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}-}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right)}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\right.-j_{sa})!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\quad+j_{sa}-j^{sa}\quad)!}\Bigg)-$$

$$\sum_{k}\ \sum_{(j_{ik}=j^{sa}+\quad-j_{sa})\ j^{sa}\quad}^{\quad-j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum\quad\quad-D-s$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{z=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i+\quad\cdot j^{sa}+\quad\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\quad+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\left((\quad\geq\quad<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge\right.$$

$$D+\boldsymbol{l_{ik}}+\quad-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+2\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\left.\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\right)\vee$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

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$D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 2 \le \boldsymbol{l} \le D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}\big) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \le j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}})} \sum_{(j_{ik}=\boldsymbol{n}-D)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{-\boldsymbol{l}+1}
$$

$$
\sum_{n_{\cdots}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}_{\cdots}-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{(n_{\cdots}-\mathbb{k}_1+1)\ n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\boldsymbol{\ldots}-2\cdot j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot(\boldsymbol{\ldots}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{\ldots}-j^{sa}-s)!}$$

$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}\ldots\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+\ldots-j_{sa}>\boldsymbol{l_{ik}}\big)$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}\ldots-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\ldots>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}\ldots j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\big)\big)\wedge$

$D\geq\ldots n\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq j_{sa}^{i}-\ldots\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}\leq j_{sa}^{ik}-1\wedge$

$\ldots\left(s,\ldots,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\left.\frac{(D+\boldsymbol{l_{sa}}-\boldsymbol{l_{sa}})!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\,(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+\cdots-D-j_{sa}-1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_s}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i-n_{ik}-1)}{(j_{ik}-2)!\cdot(n_i$$

$$\frac{(n_{ik}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+$$

$$\frac{(n_{sa}+j$$

$$\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{s}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\big(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\big)!}{(n_i-\boldsymbol{n}-I)!\cdot\big(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\big)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\big(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\big)!\cdot\big(j_{ik}-j_{sa}^{ik}-1\big)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{sa}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{} \right.$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)+$$

$$\left(\sum_{k=\boldsymbol{l}}^{} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(\quad-1)!}{(n_{\quad}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\quad)!}{(\quad-j_{ik}-\quad-1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+\quad-\boldsymbol{l_{ik}}-\quad)!}{(j_{ik}+\quad-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}\quad\boldsymbol{l_{sa}}-s)!}{(D+\quad-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 2 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} - \boldsymbol{l})} \sum_{(j_{ik} = \boldsymbol{n} + j_{sa}^{ik} - D - 1)}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1} \sum_{j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j \quad \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{i}^{}}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}^{}\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-\ j_{ik}-s-2\cdot j_{sa}^{}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-}{\left(\boldsymbol{l_s}+j_{sa}^{}-j_{ik}-\right.\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l}}{(D+j^{sa}+s-\boldsymbol{n}-\ j_{sa})!\cdot\ +j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\ j_{sa}-1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-\ -1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}+1=\boldsymbol{l_s} \wedge \ +j_{sa}^{ik}-j_{sa}>$

$D \geq \boldsymbol{n} < n \wedge l \ \mathbb{k} >= 0$

$j_{sa} \leq \ -1 \wedge j_{sa}^{ik}=\ -1 \wedge j_{sa} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, \ \mathbb{k}_2, j_{sa}, \ldots \ _{sa}^{i}\} \wedge$

$s \geq \ =s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \ =\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - D - j_{sa})} \sum_{(j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - 1)}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + \boldsymbol{n} - D}^{}\right.$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_1 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa})}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}^{}$$

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$D > \boldsymbol{n} < n$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\quad - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa})}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + \quad \cdot (j_{ik} - j_{sa}^{ik} \quad)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} \quad \boldsymbol{l_{ik}} - j_{sa})}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}} \quad \cdot (j^{sa} \quad - j_{sa})!} \cdot$$

$$\frac{(D \quad j_{sa} - \boldsymbol{l_s} \quad - s)!}{(\quad + j^{sa} - \boldsymbol{n} - \boldsymbol{l_s} \quad ! \cdot (\boldsymbol{n} + \quad - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j_{ik}-\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I)!}{(n_i - \boldsymbol{n} - I)! \cdot (\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(\quad)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{(\quad)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(\quad)}^{(\quad)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2 \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(\quad - n_{sa} - 1)!}{(\quad - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}
$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$j_{\ldots,j^{sa}} = \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot \right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-\cdot j_{ik}-s-2\cdot _{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-)!}{\left(\boldsymbol{l_s}+j_{sa}-\ _{ik}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\ )!}{(D+j^{sa}+s-\boldsymbol{n}-\ -j_{sa})!\ +j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+ -s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 \geq \boldsymbol{l} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{ } = \boldsymbol{l_{ik}} \wedge$

$D \geq \ < n \wedge I = \mathbb{k}_ = 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{ik}=j_{sa} \ \wedge j_{sa}^{s}-j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{s} \ \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \ , j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} \ s+\mathbb{k} \wedge$

$\mathbb{k}_z: z \ 2 \wedge \mathbb{k} = \ \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}})!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{(j_{ik}=\boldsymbol{l_i}+j_{sa}^{ik}-D-s)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j_{sa}-j_{sa}^{ik}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{k=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum^{(\ )}_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i \cdot 2 \cdot j^{sa} + \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot (n \cdot 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j \leq j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+} \sum_{=\boldsymbol{n}} \sum_{+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa})!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(j_{sa}^{ik} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} + j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_{ik},j^{sa}} \sum_{\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-j_{sa}}^{(D-1)} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{\mathbb{k}=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_{i}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(\quad-1)!}{(n_{\quad}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\quad)!}{(\boldsymbol{l}_{\quad}-j_{ik}-\quad-1)!\cdot(j_{ik}-j_{sa}^{\quad}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+\quad-\boldsymbol{l_{ik}}-\quad)!}{(j_{ik}+\quad-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{\quad}-\boldsymbol{l_{sa}}-s)!}{(D-j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{sa}^{ik}}^{j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+\cdots-D\ \cdots\ \boldsymbol{l_i}+\cdots-\boldsymbol{l}-s+1} \sum_{(j_{ik}=\cdots+\boldsymbol{n}+j_{sa}^{ik}-\cdots)}^{\cdots} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\cdots}
$$

$$
\sum_{n_{\cdots}+\mathbb{k}\,(n_{ik}=\boldsymbol{n}\cdots-j_{ik}+1)}^{n} \sum_{(n_{\cdots}-\mathbb{k}_1+1)}^{\cdots} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(\cdots a - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\cdots}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}$$

$$\frac{(\boldsymbol{l}_{\quad}-\boldsymbol{l}-j_{sa})}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+\quad\cdot(j_{ik}-j_{sa}^{ik}\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}\quad\boldsymbol{l}_{\quad}-j_{sa})}{(j_{ik}+\boldsymbol{\quad_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\quad\cdot(j^{sa}\quad\quad-j_{sa})!}\cdot$$

$$\frac{(\quad+j_{sa}-\quad-s)!}{+j^{sa}-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}\quad_{a}-j^{sa}-s)!}\ -$$

$$\sum_{\boldsymbol{\quad=l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}}\ \sum_{(j_{ik}-\quad\quad-D-j_{sa})}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \le j_{sa} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j_{ik}, j^{sa} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})} j^{sa} = \boldsymbol{l_{sa}} - \boldsymbol{l} + 1 \sum_{\boldsymbol{l_{sa}} + \boldsymbol{n} - D}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ \ )}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_2}^{(\ \ )}\sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}+\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-\boldsymbol{n}-j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(n_{is}+2\cdot j^{sa}+\boldsymbol{l_{sa}}-2\cdot j_{ik}-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+\boldsymbol{l_i})!}{(D+j^{sa}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \le j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l} - j_{sa} + 1)} \sum_{(j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}
$$

$$
\sum_{n_{ik} = n_{is} + j_{sa}^{s} - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\big)\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}\}\wedge$

$s\geq 4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$\sum_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}}^{(n_i}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}}^{(\ )} \sum_{=n_{ik}}$$

$$\frac{\left(n_i + \boldsymbol{\quad}^{sa} + 2 \cdot j_{s} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - 1\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + \cdot j_{sa}^{ik} - \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{\quad - \boldsymbol{l} - 1)!}{\quad + j_{sa}^{ik} - j_{} - \boldsymbol{l})! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(\quad - \boldsymbol{l_i})!}{(D + j^{sa} + \quad - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l}_{} - D - \boldsymbol{n} + 1 \wedge$

$j_{} + 1 \leq j_{ik} \leq j^{sa} + j_{} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{} \leq \boldsymbol{n} + j_{} - \wedge$

$\boldsymbol{l_{ik}} - j_{} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l}_{} > D - \boldsymbol{n} + 1 \wedge$

$j_{}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \quad \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}}^{n_{ik}+j_{ik}-j^{sa}} -j^{sa}+1
$$

$$
\frac{(n_i \quad -1)}{(j_{ik}-2)! \cdot (n_i - n_{ik} \quad +1)!} \cdot
$$

$$
\frac{(n_{ik}-n_{sa} \quad 1)!}{(j^{sa}-j_{ik} \quad (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} \quad)!}{{}_{sa}+j^{sa}-\boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l} \quad {}_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik} \quad +1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot
$$

$$
\frac{(D+j \quad -\boldsymbol{l_{sa}}-s)!}{(D \quad {}^{sa}-\boldsymbol{n} \quad \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n}+j_{sa}-j^{sa}-s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)! \cdot \left(j_{ik}-j_{sa}^{ik}-1\right)!} \cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})! \cdot (\boldsymbol{n}+j_{sa}-j^{sa}-s)!}
$$

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$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2 - j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}\sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{s}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i-n_{ik}-1)}{(j_{ik}-2)!\cdot(n_i-\quad-j_{}+1)!}\cdot$$

$$\frac{(n_{ik}-\quad-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+\quad-n_{sa}-j^{s}}\cdot$$

$$\frac{(\quad-1)}{(n_{sa}+j_{}-\boldsymbol{n}-1)!\quad-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\quad-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}\quad+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}\quad\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\quad-j^{}\quad)!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+\quad-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}} \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\big(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\big)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\big(j_{ik}-j_{sa}^{ik}-1\big)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{}\sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\left(n_{ik}=\boldsymbol{n}+\mathbb{k}_1-j_{ik}+1\right)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{}^{n_{ik}+}$$

$$\frac{(n_i \quad n_{ik}-1)!}{(j \quad 2)!\cdot(n_i \quad _{ik}-j_{ik}+1)}\cdot$$

$$\frac{(\quad -n_{sa} \quad 1)!}{(j^{sa} \quad -1)! \quad _{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{s} \quad -1)!}{(n_{sa}+ \quad ^{a}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\quad _{k}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} \quad \boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{s}} \quad -j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{}\sum_{\left(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}\right)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{\left(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)}^{(\quad)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \big) \wedge$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} - \boldsymbol{l} - 1 = 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\{j_{sa}^{s}, \mathbb{k}_z, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(\quad-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}}{(\quad-j_{ik}-\quad+1)!\cdot(j_{ik}-\quad-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+\quad-\boldsymbol{l_{ik}}-\quad)!}{(j_{ik}+\quad-j^{sa}-\boldsymbol{l_{ik}})!\,(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D-j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum^{(n_i}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}}^{(\ )} \sum$$

$$\frac{\left(n_i + \cdot j^{sa} + 2 \cdot j_{sa} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - 1\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + \cdot j_{sa}^{ik} - \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(j_{ik} + j_{sa}^{ik} - j_{sa} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + \cdot - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{\mathbb{k}}{}_{j^{sa}} = \sum_{k=\boldsymbol{l}}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-j_{sa}-1)} \; \sum_{(j_{ik}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \; \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{} \; \sum_{(n_i-j}^{(n_i-j_{ik}+\mathbb{k}_1+1)} \; \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \; \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(\quad - 1)!}{(n_{\quad} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} \quad)!}{(\quad - j_{ik} - \quad + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + \quad - \boldsymbol{l_{ik}} \quad)!}{(j_{ik} + \quad - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{s} \quad \boldsymbol{l_{sa}} - s)!}{(D \quad - j^{sa} - \boldsymbol{n} \quad)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I)!}{(n_i - \boldsymbol{n} - I)! \cdot (\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\dots,j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(\dots j^{sa}+j_{sa}^{ik}\dots)} \dots \sum_{j^{sa}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}-D-1} \dots \sum_{\dots+\mathbb{k}\,(n_{ik}=\boldsymbol{n}\dots-j_{ik}+1)} \dots \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{\dots - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>=0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j^{s}<j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}+\mathbb{k}_2 \Rightarrow$

$$j_{ik},j^{sa}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=}^{(n_i}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{(\ )}\sum_{}^{}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}-2\cdot j_{ik}-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l}-\boldsymbol{l}-1)!}{(+j_{sa}^{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+\cdot\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}\geq D-\boldsymbol{n}+1\wedge$

$j_{ik}^{ik}+1\leq j_{ik}<j^{sa}+j_{sa}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j_{ik}\leq\boldsymbol{n}+j_{sa}-1\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge=\mathbb{k}>0\wedge$

$j_{sa}^{s}=j_{sa}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}\leq j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,\ldots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s\geq 1\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\quad - j^{sa})!}$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - j_{sa})}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + \quad)! \cdot (j_{ik} - j_{sa}^{ik} \quad)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - j_{sa} - s)}{(\quad j^{sa} - \boldsymbol{n} - \quad)! \cdot (\quad - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i \quad \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I)!}{(n_i - \quad - I)! \cdot (\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$$

$$\boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-\mathbb{k}} \sum_{j^{sa}=j_{ik}+\mathbb{k}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_i-j_{ik}+1)}^{\mathbb{k}_2-j_{ik}+1)} \sum_{n_{ik}+j_{ik}-\mathbb{k}_2}^{n_{ik}+j_{ik}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{sa}=\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik}}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{sa} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D}\sum^{-\boldsymbol{l}+1}_{j^{sa}=\boldsymbol{l_s}+}{}^{-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{}^{(n_i-j_{ik}-1)}\sum_{}^{n_{ik}+j_{ik}}{}^{\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}}{\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(-n_{sa}-1)!}{(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} \ldots}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \ldots)\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge \ldots \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_s^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{ik} \ldots, j_{sa}^{i}\right\} \wedge$

$s \ldots 4 \wedge \boldsymbol{s} = \ldots \mathbb{k} \wedge$

$\mathbb{k}_z \ldots = 2 \wedge \mathbb{k} = \mathbb{k}_1 \ldots \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{s}}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{(}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{}$$

$$\frac{(n_i-1)!}{(j_{ik}-\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)!\cdot\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)!\cdot\left(j_{ik} - j_{sa}^{ik} - 1\right)!}\cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})!\cdot(\quad + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa}$ [illegible] $\wedge j_{sa}^{s} \leq j_{sa}^{ik}$ [illegible] $\wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k}$ [illegible]

$\mathbb{k}$ [illegible] $z = 2 \wedge \mathbb{k}$ [illegible] $\mathbb{k}_1 + \mathbb{k}$ [illegible] $\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)!\cdot(n_i - n_{ik} - j_{ik} + 1)!}\cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)!\cdot(n_{ik} + j_{ik} - n_{sa} - j^{sa})!}\cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)!\cdot(\boldsymbol{n} - j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\ \sum_{(j_{ik}=j_{sa}^{ik}}\ \sum_{j^{sa}=\boldsymbol{l_s}+}^{-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{-j_{ik}+1)}^{(n_i-j_{ik}-}\ \sum_{=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}}{-j_{ik}-2)!\,(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(-n_{sa}-1)!}{-j_{ik}-1)!\,(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\ \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\ \sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 +$

$$S_{j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{(\ \ )} \sum_{j^{sa} = j_{sa}+1}^{\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1} \right.$$

$$\left. \sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \right)$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum_{j^{sa}=j_{sa}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(j_{ik}+j^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{ik}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)}$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right.}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+1}^{}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+} \sum_{\left(n_{is}\right.}^{} \sum_{+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{} \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} \right. \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I)!}{(n_i - \quad)(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j \quad + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \quad \boldsymbol{l} \wedge \boldsymbol{l_s} \leq \quad - \boldsymbol{n} \quad 1 \wedge$

$j_{sa}^{ik} \leq \quad \leq j^{sa} + j_{sa}^{ik} - \quad a - 1 \wedge$

$j_{ik} + j_{sa} - \quad + 1 \leq j \quad \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} \quad _{sa} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D + \quad - \boldsymbol{n} \wedge$

$\quad n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=j_{sa}+2}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \right) \cdot
$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - 1)}{(j_{ik} - 2)! \cdot (n_i - \quad + 1)!} \cdot$$

$$\frac{(n_{ik} - n \quad - 1)!}{(j^{sa} - j_{ik} \quad 1)! \cdot (n_{ik} + \quad - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} \quad 1)!}{(n_{sa} + j \quad - \boldsymbol{n} - 1)! \quad - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \quad j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} \quad + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{\boldsymbol{l}_{sa} + j_{sa}^{ik} \quad \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \quad - j^{sa} \quad \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{s} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right.$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\quad - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa})}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + \quad)! \cdot (j_{ik} - j_{sa}^{ik} \quad)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} \quad \boldsymbol{l_{ik}} - j_{sa})}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}) \cdot (j^{sa} \quad - j_{sa})!} \cdot$$

$$\frac{(D \quad j_{sa} - \boldsymbol{l_s} \quad - s)!}{(\quad + j^{sa} - \boldsymbol{n} - \boldsymbol{l_s} \quad)! \cdot (\boldsymbol{n} + \quad - j^{sa} - s)!}\Bigg) -$$

$$\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\quad -\boldsymbol{l}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I)!}{(n_i - \boldsymbol{n} - I)! \cdot (\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \quad_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \right.$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(\quad)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{s} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1} \right.$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (\quad + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j - \boldsymbol{l_{sa}} - }{(D + j^{sa} - \boldsymbol{n} -)! \cdot j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=} \sum_{=j_{sa}^{ik}+1}^{(\quad - l)} \sum_{=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i + j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\boldsymbol{n} \quad \boldsymbol{l} \wedge \boldsymbol{l} \neq \quad {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$$

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$\boldsymbol{l_{sa}} \le D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \le D + s - \boldsymbol{n} \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \le j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}}^{(n_i-j_s+1)}
$$

$$
\frac{(\boldsymbol{n}-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)!} \cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)! \cdot \left(j_{ik}-j_{sa}^{ik}-1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})! \cdot \left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!} \cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})! \cdot (\boldsymbol{n}+j_{sa}-j^{sa}-s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-\quad^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge \quad \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{s}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \ldots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=\quad \mathbb{k} \wedge$

$\mathbb{k}_z \quad =2 \wedge \mathbb{k}=\mathbb{k}_1 \quad \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\left.\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot\right)$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}}^{a-D}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j_{sa}^{ik}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right)} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - \right. - j_{sa})!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\quad + j_{sa} - j^{sa} \quad)!}\Bigg) -$$

$$\sum_{k} \binom{\quad}{(j_{ik} = j^{sa} + \quad - j_{sa})} \binom{\quad}{j^{sa} - j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1} \quad -D-s$$

$$\sum_{\quad = \boldsymbol{n} + \mathbb{k}}^{n} \binom{(n_i - j_s + 1)}{(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik})}$$

$$\sum_{z = n_{is} + j_{sa}^{s} - j_{sa}^{ik} - \mathbb{k}_1} \binom{\quad}{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{\left(n_i + \quad j^{sa} + \quad \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \quad + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \quad \boldsymbol{n} \quad \wedge \boldsymbol{l} \neq \quad _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_{ik}} + \quad - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 2 \leq \boldsymbol{l} \leq \quad _{\boldsymbol{i}}\boldsymbol{l} - 1 \wedge$

$j_{sa}^{ik} - j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}+1)} \sum_{n_{ik}+j_{ik}-\mathbb{k}_2}^{n_{sa}=\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i}{(j_{ik}-2)}
$$

$$
\frac{-n_{sa}}{j^{sa}-j_{ik}-1)!}
$$

$$
\frac{(n_{sa}-1)!}{j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j^{sa}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_i}$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} -$ $- j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} -$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right. \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$S_{j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{(\ \ )} \sum_{j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D}^{\boldsymbol{l_s} + j_{sa} - \boldsymbol{l}} \right.$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-\quad-1)!}{(\quad)!\cdot(n_i-\quad-j_{ik}+1)!}$$

$$\frac{(n_{ik}-n_{sa}-\quad}{(j^{sa}-j_{ik}-1)!\cdot(\quad+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}\quad 1)!}{(n_{sa}+j_{ik}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{+\boldsymbol{l}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)\cdot$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ \ )}\ \sum_{=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D}$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{n_{is}+j_{sa}^{s}-j_{s}^{ik}+\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}-2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\ \ -I)!\cdot\left(\boldsymbol{n}+\ \ \cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(\ \ +j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\ \ \geq \boldsymbol{n} <\ \ \wedge \boldsymbol{l} \neq\ \ _{\boldsymbol{i}}\boldsymbol{l} \wedge\ \ \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l}\ \ +j_{sa}-\ \ _{sa}-j_{sa}^{ik}+2 \leq \boldsymbol{l} \leq\ \ _{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$j_{sa}^{ik} \leq j_{ik}-\ \ ^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$\ \ +j_{sa}\ \ _{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{=\boldsymbol{n}}^{n_{ik}+ -j^{sa}-\mathbb{k}_2} {}^{sa}+1
$$

$$
\frac{(n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + }\cdot
$$

$$
\frac{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa})!}{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa})!}\cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_s} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!}\cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!}\cdot
$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$_{fz}S_{j_{ik}\ldots a} = \left(\sum_{\boldsymbol{l}=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}+j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(j_{ik}+j^{ik}_{sa}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+j_{sa}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} + 1)} \sum_{\left(j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D\right.}^{\left.\right)} \sum_{\left.\right)}^{\left.j_{ik} + \right) - j_{sa}^{ik}}$$

$$\sum_{\left.\right)}^{(n_i - j_s} \sum_{\left.\right)}^{\left.\right)}$$

$$\sum_{\left.\right)}^{= \boldsymbol{n} + \mathbb{k}} \sum_{\left.\right)}^{\left.\right)}$$

$$\sum_{n_{ik} = n_{is} + j_s}^{\left.\right)} \sum_{\left.\right)}^{\left.\right)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} \right.\left. 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} \right.\left. - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \left.\right)\left(\boldsymbol{n} + 2 \right.\left. j^{sa} + 2 \cdot j \right.\left. - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left.\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + \left. s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa}\right)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \left. \boldsymbol{l} \wedge \boldsymbol{l_s} \leq \right. - \boldsymbol{n} \left. + 1 \wedge \right.$

$2 \leq \boldsymbol{l} \left. D + \boldsymbol{l_{ik}} + j_{sa} \right. \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq \left. + j_{sa}^{ik} - \right. - 1 \wedge$

$j_{ik} \left. - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge \right.$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \left. = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \right.$

$\left. \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge \right.$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j^{ik}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\left. \frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \right.
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{\left(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}\right)}^{\left(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{}^{n_{ik}+} \sum_{}^{-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - \quad ik - 1)!}{(\quad 2)! \cdot (n_i - \quad k - j_{ik} + 1)!} \cdot$$

$$\frac{(\quad - n_{sa} \quad)!}{(j^{sa} - \quad - 1)! \cdot \quad + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{s} \quad 1)!}{(n_{sa} + \quad - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\quad - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} \quad - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(\quad + \boldsymbol{l} \quad - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\left.\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\right) -$$

$$\sum_{k=\boldsymbol{l}} \sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)}^{\left(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{i}^{}}^{(\ )} \sum^{j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{s}^{}\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-j_{ik}-s-2\cdot j_{}^{}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\right)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l}_{}^{})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}_{}^{}-j_{sa})!\cdot(\boldsymbol{l}_{}^{}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{}^{}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l}_{}^{} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}^{} = \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \leq D+j_{}^{}-\boldsymbol{n} \wedge \boldsymbol{l}_{}^{} \leq D+s-\boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I_{}^{}-\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{}^{}-1 \wedge j_{sa}^{ik}=j_{}^{}-1 \wedge j_{sa} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{}^{}, \mathbb{k}_2, j_{sa}, \ldots, j_{sa}^{i}\} \wedge$

$s \geq z = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}}$$

$$\frac{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})!}{(\boldsymbol{n} + j_{sa} - j$$

$$\sum_{k=}^{(\boldsymbol{l_s} + j_{sa}^{ik} -} \sum_{(}^{} \sum_{a} - j_{sa}^{ik}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i - j_s + 1)} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik})}$$

$$\sum_{k = n_{is} + j_{sa}^{s} - j_{sa}^{ik} - \mathbb{k}_1}^{(\ )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{\left(n_i \cdot 2 \cdot j^{sa} + j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot (2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\left((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$\left. D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1\right) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

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$j_{sa}^{ik} \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \le D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \le j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}-\mathbb{k}_2-j_{ik}+1)}^{(n_i-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}$$

$$\frac{(\boldsymbol{l}_{\quad}-\boldsymbol{l}-j_{sa})}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+\quad\cdot(j_{ik}-j_{sa}^{ik}\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}\quad\boldsymbol{l}_{\quad}-j_{sa})}{(j_{ik}+\boldsymbol{\quad_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\quad\cdot(j^{sa}\quad\quad-j_{sa})!}\cdot$$

$$\frac{(\quad+j_{sa}-\quad-s)!}{+j^{sa}-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}\quad_{a}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\quad -s-1)} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_s}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i-n_{ik}-1)}{(j_{ik}-2)!\cdot(n_i$$

$$\frac{(n_{ik}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+$$

$$\frac{(n_{sa}+j$$

$$\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$S_{j_{ik},j^{sa}} \sum_{j_{sa}^{ik}=1}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(\quad-1)!}{(n_{\quad}+j^{sa}-\boldsymbol{n}\quad)!\cdot(\boldsymbol{n}-j^{sa}\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\quad)!}{(\boldsymbol{l}_{\quad}-j_{ik}-\quad)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+\quad-\boldsymbol{l_{ik}}-\quad)!}{(j_{ik}+\quad-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{\quad}-\boldsymbol{l_{sa}}-s)!}{(D-j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik}{}^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{n}+j_{sa}^{ik}-D-1)} \sum_{j^{sa}=\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(\quad-1)!}{(n_{\quad}+j^{sa}-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}-j^{sa}\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\quad)!}{(\boldsymbol{l_{\quad}}-j_{ik}-\quad-1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+\quad-\boldsymbol{l_{ik}}-\quad)!}{(j_{ik}+\quad-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{\quad}-\boldsymbol{l_{sa}}-s)!}{(D-j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+1}^{} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j\quad\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+1}^{}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\ \ -2\cdot j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot(\ \ -1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\ \ )!\cdot(\boldsymbol{n}\ \ -j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}\ \ \ \ \wedge\boldsymbol{l_i}\ \ \ \ -s>\ \ \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_{sa}}\ \ s-\boldsymbol{n}-j_{sa}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq\ \ -1\wedge j_{sa}^{ik}\ \ \ \ -1\wedge j_{sa}^{s}\leq\ \ \ \ \wedge$

$\boldsymbol{s}\ \ _{sa}^{s},\mathbb{k}_1,j_{sa}^{ik}\ \ \ \ j_{sa},\cdots,\ \ \}\wedge$

$s\geq\ \ \wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$_{\boldsymbol{z}}:z=\ \ \mathbb{k}=\mathbb{k}_1+\mathbb{k}\ \ \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{\boldsymbol{k}=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum_{j^{sa}=j_{sa}+1}^{n}\ \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right)} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - {}^{a} - s)!}$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{{}^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D} {}^{ik}_{s}+1$$

$$\sum_{} \sum_{} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})} -j_s+1)$$

$$\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}\,\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + 2 \cdot j^{s} \quad 2 \cdot j_{sa}^{ik} \quad j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i \quad - I)! \cdot \left(\boldsymbol{n} + \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{+ j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} \quad \wedge \boldsymbol{l} \neq \ {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \quad \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j \quad {}^{ik}_{sa} \wedge$

$j_{ik} \quad j_{sa} \quad {}^{ik}_{sa} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \quad = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}}^{n_{ik}+j_{ik}-j^{sa}} -j^{sa}+1
$$

$$
\frac{(n_i \quad -1)}{(j_{ik}-2)! \cdot (n_i - n_{ik} \quad +1)!} \cdot
$$

$$
\frac{(n_{ik}-n_{sa} \quad 1)!}{(j^{sa}-j_{ik} \quad (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} \quad}{{}_{sa}+j^{sa}-\boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l} \quad {}_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik} \quad +1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot
$$

$$
\frac{(D+j \quad -\boldsymbol{l_{sa}}-s)!}{(D \quad {}^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})! \cdot (\boldsymbol{n}+j_{sa}-j^{sa}-s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}
$$

$$
\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!} \cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}
$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{\left(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{n}} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}+\mathbb{k}_1+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{sa}+j^{sa}-\boldsymbol{n}-1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot \frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\ \ -2\cdot j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot(j_{ik}\ \ -1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\ \ )!\cdot(\boldsymbol{n}\ \ -j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \ \boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}\ \ \wedge\boldsymbol{l_i}\ \ -s>\ \ \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_s}\ \ -\boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq\ \ -1\wedge j_{sa}^{ik}\ \ -1\wedge j_{sa}^{s}\leq\ \ \wedge$

$\boldsymbol{s}\ \ j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\ \ j_{sa},\cdots,\ \ \}\wedge$

$s\geq\ \ \wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$_z\colon z=\ \ \mathbb{k}=\mathbb{k}_1+\mathbb{k}\ \ \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right)} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - {}^{a} - s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} + 1)} \sum_{(j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}\,(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik})}$$

$$\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{\left(n_i + 2 \cdot j^{} - 2 \cdot j_{sa}^{} - tk - s - 2 \cdot j_{sa} - I\right)!}{(n_i - I)! \cdot \left(\boldsymbol{n} + \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{+ j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\Big((D \geq \quad < n \wedge \boldsymbol{l} \neq \quad {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq \quad \leq j^{} \quad {}^{ik} \quad j_{sa} \wedge$$

$$j_{ik} + j_{sa} \quad {}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\quad - j_{sa}^{ik} \quad = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \quad {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+\boldsymbol{l_{ik}}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2 \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{sa} - n_{sa} - 1)!}{(0 - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (\boldsymbol{n} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} -)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=\boldsymbol{n}+j_{sa}^{ik}-j_{sa}^{ik})}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+1}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i + \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \quad)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$(D > \quad n \wedge \boldsymbol{l} \neq \quad \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

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$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j^{\dots}_{i_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{}}^{(\ )} {}^{j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\right.}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}\right.\cdot j_{ik}-s-2}.$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-)!}{(\boldsymbol{l_s}+j_{sa}\ j_{ik})!\cdot(j_{ik}\ j_{sa}^{ik}-1)!}.$$

$$\frac{(D-}{(D+j^{sa}+s-\boldsymbol{n}-\ -j_{sa})!\ +j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n}\ \boldsymbol{l_s} \leq D+\ +s-\boldsymbol{n}-1)$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l}\ \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\ +1 \wedge$

$j_{sa}^{ik} \leq j_{} \leq j^{sa}+j_{sa}^{ik}-\ a \wedge$

$j_{ik}+j_{sa}-j_{} \leq j^{sa} \leq +j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}\ _{sa}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\ <\boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\Big) \wedge$

$D\ \ <n \wedge I=\mathbb{k}>=0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(\boldsymbol{l_{sa}} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{(\ \ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=\right.}^{(n_i\ \ +1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{(\ \ )} \sum_{}^{n_{ik}} \left.-j^{sa}-\mathbb{k}_2\right)$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa} - 2 \cdot j_{ik} - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\ \ - \boldsymbol{l} - 1)!}{(\ \ + j_{sa}^{ik} - \ \ - \boldsymbol{l})! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + \ \ - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l}\ \ \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \ \ + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j\ \ + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} \ \ j_{sa} - j_{sa}^{ik} \leq j\ \ \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \ \ \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < \ \ \wedge \boldsymbol{l} \neq \ \ \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \le j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D}\sum_{j^{sa}=j_{ik}+j_{sa}-j_s}$$

$$\sum_{n_i+\mathbb{k}\,(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(j_s+1)}$$

$$\sum_{n_{is}+j_{sa}^{s}-j_{sa}^{ik}\,\mathbb{k}_1\,(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}-2\cdot j_{sa}^{ik}-j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$$

$$-j^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$$

$$\boldsymbol{l_i} \leq D+s-\boldsymbol{n}) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_{sa}} \le D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \le D + s - \boldsymbol{n})) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \le j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}^{ik}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_2-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{\quad)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{s} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\quad - j^{sa})!}$$

$$\frac{(\boldsymbol{l_{\quad}} - \boldsymbol{l} - j_{sa})}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + \quad)! \cdot (j_{ik} - j_{sa}^{ik} \quad)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} \quad \boldsymbol{l_{\quad}} - j_{sa})}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} \quad - j_{sa})!} \cdot$$

$$\frac{(\quad + j_{sa} - \quad - s)!}{(\quad + j^{sa} - \boldsymbol{n} - \quad)! \cdot (\boldsymbol{n} \quad _a - j^{sa} - s)!} -$$

$$\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(\quad)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(\quad - n_{sa} - 1)!}{(\quad - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=j_{sa}+2}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\left. \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \right.
$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=}^{j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}}^{(n_i-j_{ik}-1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(\quad-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{j^{sa}=j_{sa}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\ \ -2\cdot j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot(j_{ik}^{\ \ }-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\ \ j_{sa})!\cdot(\boldsymbol{n}^{\ \ }-j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}\ \ _{sa}\ \ \wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge\ \ \leq j_{sa}^{ik}-1$

$\boldsymbol{s}:\left\{j_{sa}^{s}\ \ _1,j_{sa}^{ik},\mathbb{k}_2,j_{sa}\ \ \cdots,j_{sa}^{i}\right\}\wedge$

$s\ \ 4\wedge\boldsymbol{s}=s\ \ \mathbb{k}\wedge$

$\mathbb{k}_z\ \ =2\wedge\mathbb{k}=\mathbb{k}_1\ \ \mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\left.\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot\right.$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)\cdot$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}-\boldsymbol{l}+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}+1)}\sum_{n_{ik}+j_{ik}-\mathbb{k}_2-j^{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_2}$$

$$\frac{(n_i-$$

$$(j_{ik}-2)$$

$$\frac{\ldots-n_{sa}-1)!}{\ldots(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{\ldots-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\ldots+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=j_{sa}^{ik}+1)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

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$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}$$

$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{s}$

$\boldsymbol{l_{sa}}-j_{sa}+1>\boldsymbol{l_s}\wedge$

$\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge\boldsymbol{l_i}\leq D+$ $\boldsymbol{n})\Big)\wedge$

$D\geq$ $<n\wedge I=$ $=0\wedge$

$j_{s}^{i}\leq j_{sa}^{i}-1$ $_{sa}^{ik}=j_{sa}$ $1\wedge j_{sa}^{s}\leq j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}$: $\{$ $\mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_s$ $\cdots, j_{sa}^{i}\}$

$\geq 4\wedge$ $=s+\mathbb{k}\wedge$

$\mathbb{k}_z: z=2\wedge\mathbb{k}$ $\mathbb{k}$ $_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right)} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - \quad - j_{sa}\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} -}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \quad + j_{sa} - j^{sa} \quad)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{\quad - j_{sa}^{ik}+1)}^{\quad} \quad \sum_{\quad - j_{sa}^{ik}}^{\quad}$$

$$\sum_{\quad = \boldsymbol{n} + \mathbb{k}}^{(n_i - j_s + 1)} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik})}$$

$$\sum_{\quad = n_{is} + j_{sa}^{s} - j_{sa}^{ik} - \mathbb{k}_1}^{(\ )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{\left(n_i + \quad \cdot j^{sa} + \quad \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \quad + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \quad \boldsymbol{n} \quad \wedge \boldsymbol{l} \neq \quad _{\boldsymbol{i}} \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D \quad \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{s} - j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\left. \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \right.
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\quad)}\sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}+j_{ik}+1)}^{(\quad)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-\quad-1)!}{(j_{ik}-\quad!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{i}\quad n_{sa}-1)!}{\quad sa}-j_{ik}\quad\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum^{(\ )}_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-\quad^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l}$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+$ $-\boldsymbol{n}-j_{sa}^{ik}$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge$ $\leq j_{sa}^{ik}-1$

$\boldsymbol{s}:\{j_{s}^{s}$ $\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,$ $\cdots,j_{sa}^{i}\}\wedge$

s $4\wedge\boldsymbol{s}=$ $\mathbb{k}\wedge$

$\mathbb{k}_z$ $=2\wedge\mathbb{k}=\mathbb{k}_1$ $\mathbb{k}_2\Rightarrow$

$$_{fz}S_{\,j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\left.\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot\right)$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=\boldsymbol{n}-D}^{}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right)}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\right.-j_{sa})!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(+j_{sa}-j^{sa}-)!}\Bigg)-$$

$$\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}-D-s)}^{(+j_{sa}^{ik}-\boldsymbol{l})}\ \sum_{}^{}\ j^{}-j_{sa}^{ik}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+\ j^{sa}+\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\ +2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\ \boldsymbol{n}\ \wedge \boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge \boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq\ a+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq \boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}^{ik}-\boldsymbol{n}<\boldsymbol{l_{ik}}\leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1\wedge$

$D\geq \boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \le j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2) \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{=\boldsymbol{l}}^{} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})\, j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-\cdot j_{ik}-s-\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-)!}{\left(\boldsymbol{l_s}+j_{sa}-j_{ik}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-)!}{(D+j^{sa}+s-\boldsymbol{n}-\ -j_{sa})!\ +j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+\ -s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l}\ \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{}^{}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l}\ -j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}} \leq\ +\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}\ \wedge$

$D \geq \boldsymbol{n} < n \wedge I\ \mathbb{k} >= 0$

$j_{sa} \leq j_{}^{}-1 \wedge j_{sa}^{ik}=\ -1 \wedge j_{sa} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{}^{ik}\ \mathbb{k}_2, j_{sa}, \ldots\ j_{sa}^{i}\} \wedge$

$s \geq\ s=s+$

$\mathbb{k}_z: z=2 \wedge\ =\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)\ j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}})!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(\boldsymbol{l_{ik}} + \boldsymbol{n} - \mathbb{k})}^{} \sum_{} j_{sa} - j_{sa}^{ik}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i - j_s + 1)} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik})}$$

$$\sum_{k = n_{is} + j_{sa}^{s} - j_{sa}^{ik} - \mathbb{k}_1}^{(\ )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{\left(n_i \cdot 2 \cdot j^{sa} + j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I) \cdot (n \cdot 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D > \ldots n \wedge \boldsymbol{l} \neq \ldots \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq \ldots + j_{sa}^{ik} - j_{sa} \wedge$

$\ldots - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \le j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-\quad)}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-\boldsymbol{l}}^{\boldsymbol{l_s}+\quad-\boldsymbol{l}}$$

$$\sum_{n_i=\quad+\mathbb{k}}^{-j_s+1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}-2\cdot j_{sa}^{ik}-j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<\quad\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\quad\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{\quad ik}\quad j_{sa}\wedge$

$j_{ik}+j_{sa}\quad{}^{ik}_{a}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}\quad>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}\leq j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{n} + j^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{n} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{}\sum_{=j_{ik}+}^{}-j_{sa}^{ik}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+}\sum_{(n_{is}}^{}+\mathbb{k}+j_{sa}^{ik}-j_{ik})$$

$$\sum_{n_{ik}=n_{is}+j_s}^{}\sum_{-j_{sa}^{ik}-\mathbb{k}_1}^{}(\quad-n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)$$

$$\frac{\left(n_i+2\cdot j^{sa}\right.\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\quad)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}-s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\quad_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\quad D-\quad+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-\quad_{a}\wedge$

$j_{ik}+j_{sa}-j_{s}\quad<j^{sa}<\quad+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{l_i}\leq D+s\quad\boldsymbol{n})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\quad_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$

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$\boldsymbol{l_{ik}} \leq D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}+1)} \sum_{j^{sa}=j_{sa}+1}^{j_{ik}-\mathbb{k}_1+1)\ \ +j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i \quad n_{ik}-1)!}{(j_{ik} \quad ?)! \cdot (n_i \quad n_{ik}-j_{ik}+1)!} \cdot
$$

$$
\frac{(n_{ik} \quad n_{sa}-1)!}{(j^{sa} \quad -1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})! \cdot (\boldsymbol{n}+j_{sa}-j^{sa}-s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j_{ik}, j^{sa} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{(\ )} \sum_{j^{sa} = j_{sa}+1}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j^{ik}_{sa}-j_{sa})}^{(\ \ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+j^{ik}_{sa}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j^{s}_{sa}-j^{ik}_{sa}-\mathbb{k}} \sum_{n_{sa}=n_{ik}+j_{ik}-}^{(\ \ )}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j^{ik}_{sa} - 2 \cdot j_{ik} - s - j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot (n + 2 \cdot j^{sa} + j_{sa} - 2 \cdot j_{ik} - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{ik} - j_{ik} - \boldsymbol{l} \cdot (j_{ik} - j^{ik}_{sa} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + \boldsymbol{n} - \boldsymbol{l_i} - j)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \ \leq D - \boldsymbol{n} + 1 \wedge$

$j^{ik}_{sa} \leq j_{ik} \leq j^{sa} + j^{ik}_{sa} - j_{sa} \wedge$

$j_{ik} + \ - j^{ik}_{sa} \leq j^{\ } \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j^{ik}_{sa} + 1 > \ \wedge \boldsymbol{l_{sa}} + \ ^{ik} - j_{sa} \ \boldsymbol{l_{ik}} \wedge$

$D + \ ^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq \ + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < \ \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \ \leq D - \boldsymbol{n} + 1 \wedge$

$j^{ik}_{sa} \leq \ \leq j^{sa} \ j_{sa} \wedge$

$j_{ik} + j_{sa} - \ ^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\ - j^{ik} \ 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j^{ik}_{sa} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j^{i}_{sa} - 1 \wedge j^{ik}_{sa} = j_{sa} - 1 \wedge j^{s}_{sa} \leq j^{ik}_{sa} - 1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+} \sum_{=\boldsymbol{n}} \sum_{-j^{sa}-\mathbb{k}_2} \sum_{^{sa}+1}
$$

$$
\frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_{sa}}+s-\boldsymbol{n}-j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = \quad + \mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k} = \quad + \mathbb{k}_2 =$

$$fzS_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=j_{sa}^{ik}}\sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{(}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{}$$

$$\frac{(n_i-\quad-1)!}{(j_{ik}-\quad)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{\quad}-n_{sa}-1)!}{{}^{sa}-j_{ik}\quad)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum^{(\ )}_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-\quad^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\quad^{ik} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_{sa}}+s-\quad) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \quad D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+\quad-j_{sa}^{ik} \leq j^{\quad} < \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 \quad \wedge \boldsymbol{l_{sa}}+\quad^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+\quad-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+\quad-\boldsymbol{n}-1)\Big) \wedge$

$\geq \boldsymbol{n} < \quad \wedge I=\mathbb{k} >= \quad \wedge$

$j_{sa} \leq j_{\quad}-1 \wedge \quad sa-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, \quad^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$> 4 \wedge \quad s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{\boldsymbol{l}=\boldsymbol{l_s}+j_{sa}^{ik}}^{(\boldsymbol{l_s}+j_{sa}^{ik})} \sum_{(j_{ik}=\boldsymbol{l_{sa}}-\boldsymbol{l}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - \boldsymbol{l}\right)!}{(n_i - \boldsymbol{n} - I)!\cdot\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - \cdot j_{ik} - s - \boldsymbol{l}_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} -)!}{\left(\boldsymbol{l_s} + j_{sa} - j_{ik}\right)!\cdot\left(j_{ik} - j_{sa}^{ik} - 1\right)!}\cdot$$

$$\frac{(D - \quad)!}{(D + j^{sa} + s - \boldsymbol{n} - - j_{sa})!\quad + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _i\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} \leq \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} -) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _i\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - + 1 \wedge$

$j_{sa}^{ik} \leq j_{} \leq j^{sa} + j_{sa}^{ik} - a \wedge$

$j_{ik} + j_{sa} - j_{} \leq j^{sa} \leq + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{s} + 1 > \boldsymbol{l_s} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D + j_{sa} - \boldsymbol{l} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _i\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

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$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{\cdot}j^{\cdot}{}_{sa} = \sum_{k=\boldsymbol{l}}^{\ \ +j_{sa}^{ik}-j_{sa}} \sum_{(j_{ik}=\ \ +\boldsymbol{n}-D)}^{\ \ +j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(\quad - 1)!}{(n_{\quad} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{s}} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} \quad j_{sa}^{ik})}{(\quad - j_{ik} - \quad + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \quad - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{s} - \boldsymbol{l_{sa}} - s)!}{(D \quad j^{sa} - \quad \boldsymbol{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I)!}{(n_i - \boldsymbol{n} - I)! \cdot (\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

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$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}$ $_{sa} - s \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} +$ $- \boldsymbol{n} - 1)$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq$ $\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n}$ $1 \wedge$

j $\leq j_{ik} \leq j$ $+ j_{sa}^{ik} -$ $\wedge$

j_{ik} $j_{sa} - j_{sa}^{ik} \leq j$ $\leq \boldsymbol{n} + j_{s}$ $\wedge$

$\boldsymbol{l_{ik}} - j_{sa}$ $1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}$ $j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n}$ $< \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

D $\boldsymbol{n} <$ $\wedge I = \mathbb{k} >= 0 \wedge$

j_{sa} $\leq j_{sa}^{i}$ $\wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}$: $\left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z$: $z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(\quad-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}}{(\quad-j_{ik}-\quad+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+\quad-\boldsymbol{l_{ik}}-\quad)!}{(j_{ik}+\quad-j^{sa}-\boldsymbol{l_{ik}})!\,(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D-j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{\quad\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{n}\sum_{}^{(n_i+1)}$$

$$\sum_{}^{(\ )}\sum_{}^{}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}-2\cdot j_{ik}-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+\cdots-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l}-\boldsymbol{l}-1)!}{(\cdots)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+\cdots-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\cdots\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\cdots+1\wedge$

$j_{sa}\leq j_{ik}\leq j^{\cdots}+j_{sa}^{ik}-j_{\cdots}\wedge$

$j_{ik}\cdots j_{sa}-j_{sa}^{ik}\leq j^{\cdots}\leq\boldsymbol{n}+j_{sa}\cdots\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}^{ik}-\boldsymbol{n}<\cdots\leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1\big)\vee$

$(D\geq\boldsymbol{n}<\cdots\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{\cdots}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$

$D+j_{sa}^{ik}-\boldsymbol{n}<\boldsymbol{l_{ik}}\leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1\wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_{sa}}+s-\boldsymbol{n}-j_{sa})\vee$

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$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{}
$$

$$
\sum_{}^{(n_i-j} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\ \ -2\cdot j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot(\ \ -1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\ \ )!\cdot(\boldsymbol{n}\ \ -j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}\ \ \ \ \wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge\ \ \leq j_{sa}^{ik}-1$

$\boldsymbol{s}:\left\{j_{sa}^{s}\ \ _1,j_{sa}^{ik},\mathbb{k}_2,j_{sa}\ \ \cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 4\wedge\boldsymbol{s}=s\ \ \mathbb{k}\wedge$

$\mathbb{k}_z\ \ =2\wedge\mathbb{k}=\mathbb{k}_1\ \ \mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\left(\sum_{k=\ \ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_{ik}=j_{sa}^{ik})}\ \sum_{j^{sa}=j_{sa}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\left.\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\right)\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j_{sa}^{ik})}^{\boldsymbol{l_{sa}}-\ _{i}\boldsymbol{l}+1}\sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-j_{ik}-\mathbb{k}_1)!}{(\quad-2)!\cdot(n_i-\quad_{k}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_{sa}-1)!\cdot(\quad+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}-j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(\boldsymbol{l_{sa}}+j_{sa}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot(j^{sa}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}\ \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\boldsymbol{n}\right)!}{(n_i-\boldsymbol{n}-\boldsymbol{n})!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \leq D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}\ (j_{ik}=j^{sa}+\cdots)}^{(\quad)} \sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{sa}}-\ _{\boldsymbol{i}}\boldsymbol{l}+}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_2+1)}^{(n_i-j_{ik}-\quad+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{\quad)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{s} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \ _{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \ _{\boldsymbol{i}}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \boldsymbol{n}\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n})! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\sum_{j_{ik}, j^{sa}} \sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{\left(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}\right)} \sum_{j^{sa} = j_{sa}}^{\boldsymbol{l_{sa}} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{\left(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1\right)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} -$$

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$$\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\boldsymbol{n}\right)!}{(n_i-\boldsymbol{n}-\boldsymbol{n})!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\ -2\cdot j_{sa}\right)}\cdot$$

$$\frac{(D-\boldsymbol{l_i}}{(D+s-\boldsymbol{n}\ )!\ \boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{\ }}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\ j_{sa}\leq j_{\ }-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{\ }\right.$

$s\geq4\wedge\boldsymbol{s}=s+\mathbb{k}_{\ }\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{z}S_{j_{ik},j^{sa}}=\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{ik}}+j_{sa}-\ _{i}\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - {}_{i}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{i}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} -$$

$$\sum_{k={}_{i}\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{s}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_{1}+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s \quad 2 \cdot j_{sa} - \boldsymbol{n}\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n})! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} \quad {}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!}$$

$$\frac{(}{(D \quad - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} \quad _{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \quad >= 0 \wedge$

$j_{sa}^{i} \leq j_{sa}^{i} - \quad j_{sa}^{ik} = j_{s} \quad - 1 \wedge j_{sa}^{s} \leq j_{sa}^{i} \quad - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j \quad \cdots, j_{sa}^{i}$

$s \geq 4 \wedge \quad = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \quad \mathbb{k}_1 + \quad \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k={}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-{}_{i}\boldsymbol{l}-j_{sa}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-{}_{i}\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}-s)!}$$

$$\sum_{k=\ }^{(\ )}\sum_{(j_{ik}=j_{sa}^{ik})\ j^{sa}=}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}\ (}^{n}\ \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\boldsymbol{n}\right)!}{(n_i-\boldsymbol{n}-\boldsymbol{n})!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}={}_{i}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{sa}^{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq n+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}-j_{sa}+j_{sa}^{ik}-s=\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}-1\wedge j_{sa}^{s}\leq j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s\geq 4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$fzS_{j_{ik},j^{sa}}=\sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}+1\right)}\ \sum_{(j_{ik}=j_{sa}^{ik})}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\quad - j^{sa})!}$$

$$\frac{\left(\boldsymbol{l_{ik}} \quad _{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{\quad}\right)}{\left(\boldsymbol{l_{ik}} - j_{ik} - \ _{\boldsymbol{i}}\boldsymbol{l} + \quad \right) \cdot \left(j_{ik} - j_{sa}^{ik} \quad \right)!} \cdot$$

$$\frac{j_{sa} - \boldsymbol{l}_{\boldsymbol{j}} \quad - s)!}{(D + \quad - \boldsymbol{n} \quad \quad \boldsymbol{a} - s)!} -$$

$$\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ \ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\quad \mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ \ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i \quad 2 \cdot j^{sa} + 2 \quad j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \boldsymbol{n}\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n}) \quad \left(\boldsymbol{n} \quad 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} \quad n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \quad \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq \quad + j_{sa}^{ik} \quad a \wedge$

$j_{i} \quad j_{sa} \quad j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \quad > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \quad + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\ {}_{i}\boldsymbol{l}-j_{sa}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=}^{n_{ik}+j_{ik}-j^{sa}-}
$$

$$
\frac{(n_i - \quad 1)!}{(j_{ik}-2)!\cdot(n_i - n_{ik} - \quad + 1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa} \quad 1)!}{(j^{sa}-j_{ik} \quad + j_{ik} \quad n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)}{(\quad + j^{sa} \quad \boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\quad - \ {}_{i}\boldsymbol{l} - j_{sa}^{ik})!}{\mathbb{k}_k - j_{ik} - \quad + 1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{\quad + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}-s)!} -
$$

$$
\sum_{k=\ {}_{i}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \boldsymbol{n}\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n})!\cdot\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}
$$

$$
\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge
$$

$$
j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge
$$

$$
j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge
$$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z \sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{sa}} - {}_{\boldsymbol{i}}\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\boldsymbol{n}\right)!}{(n_i-\boldsymbol{n}-\boldsymbol{n})!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\quad-2\cdot j_{sa}\right)}\cdot$$

$$\frac{(D-\boldsymbol{l_i}}{(D+s-\boldsymbol{n}\quad)!\ \boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}\quad s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l}_{\boldsymbol{ik}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\quad j_{sa}\leq j_{sa}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}\right.\wedge$

$s\geq4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z\colon z\quad2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$\quad j_{ik},j^{sa}=\left(\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{ik}}+j_{sa}-\ _{i}\boldsymbol{l}-j_{sa}^{ik}+1}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - {}_{i}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{i}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!}\Bigg) +$$

$$\Bigg(\sum_{k={}_{i}\boldsymbol{l}}^{\left(j^{sa}+j_{sa}^{ik}-j_{sa}-1\right)} \sum_{\left(j_{ik}=j_{sa}^{ik}\right)}^{\boldsymbol{l_{ik}}+j_{sa}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}} \sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1\right)}^{\left(n_i-j_{ik}-\mathbb{k}_1+1\right)} \sum_{n_{sa}=}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - \quad - 1)!}{(\quad)! \cdot (n_i - \quad - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (\quad + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} \quad 1)!}{(n_{sa} + j \quad - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\quad - {}_{i}\boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - {}_{i}\boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(\quad + j \quad - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k={}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}+1\right)} \sum_{\left(j_{ik}=j_{sa}^{ik}\right)}^{\boldsymbol{l_{sa}}-{}_{i}\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1\right)}^{\left(n_i-j_{ik}-\mathbb{k}_1+1\right)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-{}_{i}\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)\cdot$$

$$\sum_{k=\quad}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}\quad -j_{ik}-\mathbb{k}_1}\ \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+2\cdot j_{sa}^{ik}-2\cdot\quad -s-\quad j_{sa}-\boldsymbol{n}\right)!}{(n_i-\boldsymbol{n}-\boldsymbol{n})!\cdot\left(\boldsymbol{n}\quad 2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\quad{}_{i}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D\quad{}_{sa}-\boldsymbol{n}\wedge$

$j_{sa}^{ik}\leq\quad\leq j^{sa}+j_{sa}\quad j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\quad 1\leq j^{sa}\quad\boldsymbol{n}+j_{sa}\quad s\wedge$

$\boldsymbol{l_{ik}}\quad{}_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\quad+j_{sa}^{ik}-\quad_{sa}>\boldsymbol{l_{ik}}\wedge$

$\quad\geq\boldsymbol{n}<\quad\wedge I=\mathbb{k}>=\quad\wedge$

$j_{sa}\leq\quad-1\wedge\quad\quad_{sa}-1\wedge j_{sa}^{s}\leq j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\{j_{sa}^{s},\mathbb{k}_1,\quad\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$>4\wedge\quad s+\mathbb{k}\wedge$

$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{\,j_{ik},j^{sa}}=\left(\sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}}-\ {}_{i}\boldsymbol{l}+1\right)}\ \sum_{(j_{ik}=j_{sa}^{ik})}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}} - {}_{\boldsymbol{i}}\boldsymbol{l}+1} \right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

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$$\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \boldsymbol{n}\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n})!\cdot\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - \quad - 2\cdot j_{sa}\right)}\cdot$$

$$\frac{(D - \boldsymbol{l_i}}{(D + s - \boldsymbol{n}\quad)!\ \boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{\quad}} \wedge \boldsymbol{l_i} + j_{sa} - \quad > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - \quad \wedge j_{sa}^{s} \leq j_{sa}^{ik} -$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = \quad + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \quad + \mathbb{k}_2$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\ _{i}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)!\cdot(n_i - n_{ik} - j_{ik} + 1)!}\cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)!\cdot(n_{ik} + j_{ik} - n_{sa} - j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}-s)!}\ -$$

$$\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}\ \sum_{(j_{ik}=j_{sa}^{ik})}^{(\ \ )}\ \sum_{j^{sa}=j_{}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ \ )}\ \sum_{n_{sa}}\ \sum_{j_{ik}^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\boldsymbol{n}\right)!}{(n_i-\boldsymbol{n}-\boldsymbol{n})!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{}-s-2\cdot j_{sa}\right)}\cdot$$

$$\frac{}{(D-s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} =\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D+j_{sa}-\boldsymbol{n} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} =\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D+s-\boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} =\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D+s-\boldsymbol{n})\Big) \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}_i}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{n_{ik}+j_{ik}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik}}{j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(\quad - n_{sa} \quad 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(j_{sa} - j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot (j^{sa} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}_i}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \boldsymbol{n}\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n})! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}
$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

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$2 \le \boldsymbol{l} \le D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}) \vee$

$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \le \boldsymbol{l} \le D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}})) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$j^{\{j_{ik}, j^{sa}\}} \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\left. \frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot \right.$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\ \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(j_{ik}+j^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{ik}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)}$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)} \qquad \sum_{\boldsymbol{l}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik}+1}$$

$$(n_i - j_s$$

$$\sum_{\boldsymbol{n}+\mathbb{k}} \sum_{\left(n_{is}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}$$

$$\sum_{n_{ik}=n_{is}+j_{s}} \sum_{-\mathbb{k}_1} \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} \right. \cdot j_{sa}^{ik} - 2 \cdot j_{i} - s - 2 \cdot j_{sa} - I)!}{(n_i - \quad)(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j \quad + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l}_{} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 2 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \quad = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}\big) \vee$

$(D \quad < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 2 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}\big)\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\,j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=j_{ik}-\mathbb{k}_1+1)}^{} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum^{(\ )}_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)!\cdot\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)!\cdot\left(j_{ik} - j_{sa}^{ik} - 1\right.}\cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})!\cdot(\quad + j_{sa} - \quad^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l_{sa}} - j_{sa}^{ik} +$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}\big)\big) \wedge$

$D \geq \quad < n \wedge I = \mathbb{k}_1 = 0 \wedge$

$j_{sa}^{s} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa}^{s} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa} \quad sa, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} \quad s + \mathbb{k} \wedge$

$\quad \cdot z = 2 \quad \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\left(\sum_{k=\boldsymbol{l}}^{+\boldsymbol{n}+j_{sa}^{ik}-j_{sa}-1)} \sum_{(j_{ik}=\boldsymbol{l}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{}\right.$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(-1)!}{(n_{-}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}}{(-j_{ik}-1)!\cdot(j_{ik}-j_{sa}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}})!}{(j_{ik}+-j^{sa}-\boldsymbol{l_{ik}})!\,(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-)!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(\ )} \sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \left(\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-1} \right) \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D} \right.
$$

$$
\left(\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1} \right.
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{\quad ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \right.
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(\quad-1)!}{(n_{\quad}+j^{sa}-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}-j^{sa}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\quad)!}{(\quad-j_{ik}-\quad)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+\quad-\boldsymbol{l_{ik}}-\quad)!}{(j_{ik}+\quad-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}\quad\boldsymbol{l_{sa}}-s)!}{(D+\quad-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 2 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(j_{ik} = \boldsymbol{n} + j_{sa}^{ik} - D - 1)}^{\boldsymbol{l_{sa}} + \boldsymbol{l} + 1} \sum_{j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D}^{n}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{i}^{}}^{(\quad)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}^{}\right.}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-\right.\cdot j_{ik}-s-2\cdot)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-}{\left(\boldsymbol{l_s}+j_{sa}^{i}-j_{ik}-\right.(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l}}{(D+j^{sa}+s-\boldsymbol{n}-\cdot j_{sa})!\cdot+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\cdot j_{sa}-1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-\cdot-1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+\cdot \leq j^{sa} \leq \boldsymbol{n}+\cdot-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}+\cdot=\boldsymbol{l_s} \wedge \cdot+j_{sa}^{ik}-j_{sa}>$

$D \geq \boldsymbol{n} < n \wedge \cdot \cdot \mathbb{k} > 0 \wedge$

$j_{sa} \leq \cdot-1 \wedge j_{sa}^{ik}=\cdot-1 \wedge j_{sa}<j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \cdot j_{sa}^{ik}, \mathbb{k}_2, j_{s}\cdots, j_{sa}^{i}\} \wedge$

$s \geq \cdot=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \cdot=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{\,j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa})}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + \boldsymbol{n} - D}^{}\right.$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} - j_{ik} + 1)}^{n_i - j_{ik} - \mathbb{k}_2} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa})}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}^{}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l}_{\quad}-\boldsymbol{l}-j_{sa})}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+\quad\cdot(j_{ik}-j_{sa}^{ik}\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}\quad\quad-j_{sa})}{(j_{ik}+\boldsymbol{\quad sa}-j^{sa}-\boldsymbol{l_{ik}}\quad\cdot(j^{sa}\quad\quad-j_{sa})!}\cdot$$

$$\frac{(D\quad j_{sa}-\boldsymbol{l_s}\quad-s)!}{(\quad+j^{sa}-\boldsymbol{n}-\boldsymbol{l}_{\quad}!\cdot(\boldsymbol{n}+\quad-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{\quad}-\boldsymbol{l})}\ \sum_{(j_{ik}-\boldsymbol{l}+\boldsymbol{n}+j_{sa}^{ik}-D-s)\ j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\quad}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(\quad=\boldsymbol{n}+\mathbb{k}_2-\quad+1)}^{(\quad j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{\quad n_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_{\quad} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_{\quad} - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(\quad - n_{sa} - 1)!}{(\quad - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\quad}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\quad}
$$

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$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1\geq\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2=$

$$j_{\dots,j^{sa}}=\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\ \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-\cdot j_{ik}-s-2\cdot_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-)!}{\left(\boldsymbol{l_s}+j_{sa}-j_{ik}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-)!}{(D+j^{sa}+s-\boldsymbol{n}-\quad-j_{sa})!\quad+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+\quad-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{\quad}=\boldsymbol{l_{ik}} \wedge$

$D \geq \quad < n \wedge I=\mathbb{k}_{\quad}0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{\quad}^{ik}=j_{sa}\quad 1 \wedge j_{sa}^{s}\quad_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{s}\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,\quad,\cdots,j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s}\quad s+\mathbb{k} \wedge$

$\mathbb{k}_z: z\quad 2 \wedge \mathbb{k}=\quad \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}}$$

$$\frac{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})!}{(\boldsymbol{n} + j_{sa} - j$$

$$\sum_{(j_{ik}=\boldsymbol{l_i}+$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{(n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i - \boldsymbol{n} \cdot j^{sa} + \right.$$

$$\frac{\left(n_i - \boldsymbol{n} \cdot j^{sa} + j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot (n$$

$$2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq$ $n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j$ $\leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

j $j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{=\boldsymbol{n}}^{n_{ik}+\cdots-j^{sa}-\mathbb{k}_2} {}^{sa}+1
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + \cdots)!} \cdot
$$

$$
\frac{\cdots - 1)!}{(j^{sa} \cdots - 1)! \cdot (n_{ik} + j_{ik} \cdots - j^{sa})!} \cdot
$$

$$
\frac{(\cdots - 1)!}{(n_{sa} \cdots j^{sa} - \boldsymbol{n} \cdots 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\cdots - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l}_{\cdots} \cdots j_{\cdots} \cdots + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{\cdots} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_{ik},j^{sa}} \sum_{\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-j_{sa})}^{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(\quad - 1)!}{(n_{\quad} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \quad)!}{(\boldsymbol{l_i} - j_{ik} - \quad 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + \quad - \boldsymbol{l_{ik}} - \quad)!}{(j_{ik} + \quad - j^{sa} - \boldsymbol{l_{ik}}) \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{\quad} - \boldsymbol{l_{sa}} - s)!}{(D - j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I)!}{(n_i - \boldsymbol{n} - I)! \cdot (\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{\cdots}^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+\cdots-D} \sum_{(j_{ik}=\cdots+\boldsymbol{n}+j_{sa}^{ik}-\cdots)}^{\boldsymbol{l_i}+\cdots-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{}
$$

$$
\sum_{n_{\cdots}+\mathbb{k}\,(n_{ik}=\boldsymbol{n}\cdots-j_{ik}+1)}^{n} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{(n_{\cdots}-\mathbb{k}_1+1)\cdots n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{\cdots_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{\cdots_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l}_{\quad}-\boldsymbol{l}-j_{sa})}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+\quad)!\cdot(j_{ik}-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}\quad-\boldsymbol{l}_{\quad}-j_{sa})}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\quad)!\cdot(j^{sa}\quad-j_{sa})!}\cdot$$

$$\frac{(\quad+j_{sa}-\quad-s)!}{(\quad+j^{sa}-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}\quad_a-j^{sa}-s)!}-$$

$$\sum_{\boldsymbol{l}=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}} \sum_{(j_{ik}-\quad-j_{sa}^{ik}-D-j_{sa})}^{\quad} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$$

$$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j_{ik}, j^{sa} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j^{ik}_{sa}-j_{sa})}^{(\ \ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+j^{ik}_{sa}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j^{s}_{sa}-j^{ik}_{sa}-\mathbb{k}}^{(\ \ )} \sum_{n_{sa}=n_{ik}+j_{ik}-\ldots-\mathbb{k}_2)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j^{ik}_{sa} - 2 \cdot j_{ik} - s - \ldots j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\ldots + 2 \cdot j^{sa} + \ldots j_{sa} \ldots 2 \cdot j_{ik} \ldots - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\ldots - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{\ldots} - j_{ik} - \ldots\right)! \cdot \left(j_{ik} - j^{ik}_{sa} - 1\right)!} \cdot$$

$$\frac{(D - \ldots \boldsymbol{l_i})!}{(\ldots + j^{sa} + \ldots \boldsymbol{n} - \boldsymbol{l_i} - j \ldots)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \ldots + 1 \wedge$$

$$j^{ik}_{sa} + 1 \leq j_{ik} \leq j^{sa} + j^{ik}_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j^{ik}_{sa} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j^{ik}_{sa} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j^{ik}_{sa} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > \ldots - \boldsymbol{n} + \ldots$$

$$j^{ik}_{sa} + 1 \leq j_{ik} \leq j^{sa} + j_{\ldots} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j^{\ldots}_{sa} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j^{ik}_{sa} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j^{ik}_{sa} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$$

$$(D \geq \boldsymbol{n} < \ldots \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$$

$$j^{ik}_{sa} + 1 \leq j_{ik} \leq j^{sa} + j^{ik}_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j^{ik}_{sa} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j^{ik}_{sa} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j^{ik}_{sa} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}})\Big) \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{sa}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+\cdots)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{n_{ik} - \mathbb{k}_{\cdots} - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} + 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j_{\cdots} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\sum_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1} \sum_{j^{sa} = \boldsymbol{l_{ik}} + \boldsymbol{n} + j_{sa} - D - j_{sa}^{ik}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=}^{(n_i+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_2}^{(\ )}\sum_{=n_{ik}}$$

$$\frac{\left(n_i+\boldsymbol{n}+j^{sa}+2\cdot j_{sa}-2\cdot j_{ik}-s-2\cdot j_{sa}-1\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+\cdot j_{sa}^{ik}-\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{+j_{sa}^{ik}-\boldsymbol{l})!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}_{\boldsymbol{s}}-D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}<j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}_{\boldsymbol{s}}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=}^{n_{ik}+j_{ik}-j^{sa}-} \sum_{-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - \quad)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \quad + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j^{sa} - \boldsymbol{l_{sa}} - s)!}{(D - j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}
$$

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$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j_{sa}^{ik} - j_{sa})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{is}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - \quad + 1)!} \cdot$$

$$\frac{(n_{ik} - \quad - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + \quad - n_{sa} - j^{s}} \cdot$$

$$\frac{(\quad - 1)!}{(n_{sa} + \quad - \boldsymbol{n} - 1)! \quad - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \quad - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} \quad + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} \quad \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \quad - j^{sa} \quad)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + \quad - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} < j^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$f_Z S_{j_{ik}} \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\big(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\big)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\big(j_{ik}-j_{sa}^{ik}-1\big)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_1-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{}^{n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{sa} - n_{sa} - 1)!}{(j^{sa} - 1)! \cdot n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{\left(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}\right)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\big)\wedge$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\left\{j_{sa}^{s},\cdots,j_{sa}^{ik}-1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{}\sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{(\ \ )}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\left(n_{is}=\right.}^{(n_i\ \ +1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}}^{(\ \ )}\sum_{=n_{ik}}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}-2\cdot j_{ik}-s-2\cdot j_{sa}-1\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}-2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(j_{sa}^{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\left((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge\right.$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{\mathbb{g}}{}_{j^{sa}} = \sum_{k=\boldsymbol{l}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{(j_{ik}}^{(\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+\quad-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(\quad-1)!}{(n_{\quad}+j^{sa}-\boldsymbol{n}-\quad1)!\cdot(\boldsymbol{n}-j^{s}}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}\quad}{(\quad-j_{ik}-\quad+1)!\cdot(j_{ik}-\quad-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+\quad-\boldsymbol{l_{ik}}\quad)!}{(j_{ik}+\quad-j^{sa}-\boldsymbol{l_{ik}})!\,(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{s}\quad\boldsymbol{l_{sa}}-s)!}{(D\quad-j^{sa}-\quad\quad)!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\dots,j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(\dots j^{sa}+j_{sa}^{ik}\dots)} \dots \sum_{j^{sa}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}-D-1}^{\dots-\boldsymbol{l}}
$$

$$
\sum_{\dots+\mathbb{k}\,(n_{ik}=\boldsymbol{n}\dots-j_{ik}+1)}^{n} \dots \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{(\dots j_{ik}-\mathbb{k}_1+1)\dots n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{\dots - n_{ik} - \mathbb{k}_1 - 1)!}{\dots j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{\dots - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ \ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\quad j_{sa}^{i}\right\}\wedge$

$s\geq5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$j_{ik},j^{sa}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=[illegible]-j_{ik})}^{(n_i-[illegible]+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}[illegible]-\mathbb{k}_1} \sum_{(n_{ik}[illegible]-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}[illegible] - 2\cdot j_{ik} [illegible] - 2\cdot j_{sa} - I)!}{(n_i - \boldsymbol{n} - I)! \cdot (\boldsymbol{n} + 2\cdot j^{sa} + [illegible] j_{sa}^{ik} - [illegible] - s - 2\cdot j_{sa})!} \cdot$$

$$\frac{([illegible] - \boldsymbol{l} - 1)!}{([illegible] + j_{sa}^{ik} - [illegible] - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + [illegible] - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \land \boldsymbol{l_s} [illegible] D - \boldsymbol{n} + 1 \land$

$j_{sa}^{ik} + 1 \leq j_{ik} [illegible] j^{sa} + [illegible] - j_{sa} \land$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq [illegible] \leq \boldsymbol{n} + [illegible] \land$

$\boldsymbol{l_{ik}} - j_{s}[illegible] + 1 > \boldsymbol{l_s} \land \boldsymbol{l_{sa}} [illegible] j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \land \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \land$

$D \geq \boldsymbol{n} < n [illegible] = \mathbb{k} > [illegible] \land$

$j_s [illegible] j_{sa} [illegible] 1 \land j_{sa}^{ik} = j_{sa} - 1 \land j_{sa}^{s} < j_{sa}^{ik} - 1 \land$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, [illegible], j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \land$

$s \geq [illegible] \boldsymbol{s} = s + \mathbb{k} \land$

$\mathbb{k}_z: z = 2 \land \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-j_{sa})}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+\quad)!\cdot(j_{ik}-j_{sa}^{ik}\quad)!}\cdot$$

$$\frac{(D-\quad \boldsymbol{l_{sa}}-s}{(\quad j^{sa}-\boldsymbol{n}-\quad)!\cdot(\quad -s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i\quad\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\quad-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\quad n\wedge \boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq \boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-\mathbb{k}} \sum_{j^{sa}=j_{ik}+\mathbb{k}_2-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{- n_{sa} - 1)!}{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}}) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z \geq 2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{\left(j_{ik} = \boldsymbol{l_s} + \boldsymbol{n} + j_{sa}^{ik} - D\right.}^{} \sum_{j^{sa} = \boldsymbol{l_s} + \cdots - \boldsymbol{l} + 1}^{}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{\left(n_{ik} = \right.}^{(n_i - j_{ik} - \cdots + 1)} \sum_{j^{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - \cdots - \mathbb{k}_2}$$

$$\frac{(n_i \cdots n_{ik} - \mathbb{k}_1 \cdots}{(j_{ik} \cdots 2)! \cdot (n_i \cdots n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(\cdots - n_{sa} \cdots 1)!}{\cdots a} - j_{ik} - 1)! \cdots n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\cdots_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{\left(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}\right)}^{\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1} \sum_{j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s}^{}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{\left(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik}\right)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{s} - j_{sa}^{ik} - \mathbb{k}_1}^{} \sum_{\left(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2\right)}^{(\ \ )}$$

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$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}$$

$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge$ $<j_{sa}^{ik}-1$

$\boldsymbol{s}:\{j_s^s,\cdots,\mathbb{k}_1,j_{sa}^{ik},$ $j_{sa},\cdots,j_{sa}^{i}\}\wedge$

s $5\wedge\boldsymbol{s}=$ $\mathbb{k}\wedge$

$\mathbb{k}_z$ $=2\wedge\mathbb{k}=\mathbb{k}_1$ $\mathbb{k}_2\Rightarrow$

$$fzS_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)}\sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{s}}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{(}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{}$$

$$\frac{(\quad-n_{ik}-\quad-1)!}{(j_{ik}-2)!\cdot(\quad-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{\quad}-n_{sa}-1)!}{{}^{sa}-j_{ik}\quad)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}(\quad)\wedge j_{sa}^{s}<j_{sa}^{ik}(\quad)\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}(\quad)\right\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=s+\mathbb{k}$

$\mathbb{k}(\quad)z=2\wedge\mathbb{k}(\quad)\mathbb{k}_1+\mathbb{k}(\quad)\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{n_{ik}+j_{ik}-\mathbb{k}_1-\mathbb{k}_2}^{n_{ik}+j_{ik}-\mathbb{k}_2} \sum_{j^{sa}=\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(\quad - n_{sa} - 1)!}{a} - j_{ik} - 1)! \cdot n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

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$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<{}^{ik}_{sa}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2$

$$S_{j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\ \ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{j^{sa}=j_{sa}+1}^{}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\Bigg(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=j_{sa}+2}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(j_{ik} + j^{sa} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)}$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\ \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\boldsymbol{l_{ik}}+j_{\ }-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum_{j^{sa}=j_{\ }+1}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}\,(n_{is}}^{(n_i-j_s+}\ \sum_{+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{n_{ik}=n_{is}+j_{s}}\ \sum_{{}^{ik}_{a}-\mathbb{k}_1\ (n_{}-n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}\ \ 2\cdot j_{sa}^{ik}-2\cdot j_{i}\ -s-2\cdot j_{sa}-I\right)!}{(n_i-\ \ )\left(\boldsymbol{n}+2\ ^{sa}+2\cdot j\ \ -2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j\ \ +s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \ \boldsymbol{l}\wedge\boldsymbol{l_s}\leq\ \ -\boldsymbol{n}\ \ 1\wedge$

$j_{sa}^{ik}\leq\ \ \leq j^{sa}+j_{sa}^{ik}-\ \ _{a}-1\wedge$

$j_{ik}+j_{sa}-\ \ +1\leq j^{\ }\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}\ \ _{s}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$\boldsymbol{l_{sa}}\leq D+\ \ -\boldsymbol{n}\wedge$

$\ \ \ \ n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=j_{sa}+2}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \right) \cdot
$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-\mathbb{k}_1-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{sa}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+j_{sa}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=j_{sa}^{ik}+1)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)!\cdot(n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}\cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)!\cdot(n_{ik} + j_{ik} - n_{sa} - j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)!\cdot(\boldsymbol{n} - j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)!\cdot\left(j_{ik} - j_{sa}^{ik} - 1\right)!}\cdot$$

$$\left.\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})!\cdot(\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\right) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l}_{\quad}-\boldsymbol{l}-j_{sa})}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+\quad!\cdot(j_{ik}-j_{sa}^{ik}\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}\quad\boldsymbol{l}_{\quad}-j_{sa})}{(j_{ik}+\boldsymbol{\quad_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\quad!\cdot(j^{sa}\quad-j_{sa})!}\cdot$$

$$\frac{(D\quad j_{sa}-\boldsymbol{l_s}\quad-s)!}{(\quad+j^{sa}-\boldsymbol{n}-\boldsymbol{l}_{\quad}!\cdot(\boldsymbol{n}+\quad-j^{sa}-s)!}\Bigg)-$$

$$\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\quad-\boldsymbol{l}+1)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_Z S_{j_{ik}, j^{sa}} = \left(\sum_{k=} \sum_{} \sum_{j_{sa}-j_{sa}^{ik}} \right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{s} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (\quad a + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j - \boldsymbol{l_{sa}} - \quad}{(D + j^{sa} - \boldsymbol{n} - \quad + j_{sa} - j_{sa} - s)!}\Bigg) -$$

$$\sum_{k=} \quad \sum_{j_{ik}=j_{sa}^{ik}+1} \quad \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(\quad -\boldsymbol{l})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \quad \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \quad \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i + \quad j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \quad I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\boldsymbol{n} \quad \wedge \boldsymbol{l} \neq \quad _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$$

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$\boldsymbol{l_{sa}} \le D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \le D + s - \boldsymbol{n} \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}}^{(n_i-j_{ik}-\mathbb{k}_1+1)\ n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2+1}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-\quad^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l}_{\boldsymbol{i}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge\ \ _{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{s}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\ \ j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\ \ 5\wedge\boldsymbol{s}=\ \ \mathbb{k}\wedge$

$\mathbb{k}_z\ \ =2\wedge\mathbb{k}=\mathbb{k}_1\ \ \mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)\,\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{}\sum_{j^{sa}=\boldsymbol{l_{sa}}}^{a-D}\right.+$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{}\sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}+$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right)}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\right.-j_{sa})!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(+j_{sa}-j^{sa}-)!}\Bigg)-$$

$$\sum_{k}\ \sum_{(j_{ik}=j^{sa}+-j_{sa})\ j^{sa}-}^{\ j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum_{-D-s}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+\cdot j^{sa}+\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\ +2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\ \boldsymbol{n}\ \wedge \boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge \boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_{ik}}+\ -\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+2\leq\boldsymbol{l}\leq\ {}_{\boldsymbol{i}}\boldsymbol{l}-1\wedge$

$j_{sa}^{ik}-j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik}\wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\cdots)} \sum_{j^{sa}=\cdots+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\cdots+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}\cdots+1)} \sum_{\cdots=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}\cdots-\mathbb{k}_2}
$$

$$
\frac{(n_{ik}-n_{ik}}{(j_{ik}\cdots 2)! \cdot (n_{ik}-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot
$$

$$
\frac{\cdots-n_{sa}\cdots 1)!}{\cdots j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot
$$

$$
\frac{(n_{sa}-1)!}{(\cdots-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(\cdots+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!} \cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

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$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_i}$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}\leq j_{sa}^{ik}-$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots_{sa}\right\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=$ $+\mathbb{k}_2\Rightarrow$

$$S_{j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\left.\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot\right.$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} +1$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - n_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(+\boldsymbol{l} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{l=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D}$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{n_{is}+j_{sa}^{s}-j_{s}^{ik}+\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}-2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\quad-I)!\cdot\left(\boldsymbol{n}+\quad\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\geq \boldsymbol{n} < \quad \wedge \boldsymbol{l} \neq \ _i\boldsymbol{l} \wedge \quad \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l}\quad+j_{sa}-\quad\quad-j_{sa}^{ik}+2\leq\boldsymbol{l}\leq\ _i\boldsymbol{l}-1\wedge$

$j_{sa}^{ik}\leq j_{ik}-\quad^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$\quad+j_{sa}\quad\quad_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{=\boldsymbol{n}}^{n_{ik}+ -j^{sa}-\mathbb{k}_2} {}^{sa}+1
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} - j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{sa}} - j_{sa}^{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2$

$$_{fz}S_{j_{ik}\ldots a}=\left(\sum_{\boldsymbol{l}=}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(j_{ik}+j^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{ik}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D\right.}^{\left.\left(j_{sa}=j_{ik}+\right.\right.}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s}\sum_{\left(n_i\right.}^{\left.+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}$$

$$\sum_{n_{ik}=n_{is}+j_s}\sum_{-j_{sa}^{ik}-\mathbb{k}_1\ (}^{=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}\right.\ 2\cdot j_{sa}^{ik}-2\cdot j_{i}-s-2\cdot j_{sa}-I)!}{(n_i-\ (\boldsymbol{n}+2^{sa}+2\cdot j\ -2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\ s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\ \wedge\boldsymbol{l_s}\leq\ -\boldsymbol{n}\ 1\wedge$

$2\leq\boldsymbol{l}\ D+\boldsymbol{l_{ik}}+j_{sa}\ \boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq\ ^{sa}+j_{sa}^{ik}-\ a-1\wedge$

$j_{ik}\ _s-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\ =\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j^{ik}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\left. \frac{(\boldsymbol{l_{sa}} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{\left(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}\right)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{}^{n_{ik}+}\sum_{}^{-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(-n_{sa}-1)!}{(j^{sa}-1)!\cdot+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{+\boldsymbol{l}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{j_{ik}, j^{} \cdots} = \sum_{k=\boldsymbol{l}}^{(\cdots - \boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{i}^{}}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}^{}\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-\ j_{ik}-s-2\cdot j_{sa}^{}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-\ )!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\ \right)!\cdot(j_{ik}+j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l}_{\boldsymbol{i}}-\ )!}{(D+j^{sa}+s-\boldsymbol{n}-\ -j_{sa})!\cdot(\ +j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+\ -s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$

$\boldsymbol{l_{ik}}\leq D+j^{}-\boldsymbol{n}\wedge\boldsymbol{l}\leq D+s-\boldsymbol{n}\wedge$

$D\geq\boldsymbol{n}<n\wedge I\ -\mathbb{k}>0\wedge$

$j_{sa}\leq\ -1\wedge j_{sa}^{ik}=\ -1\wedge j_{sa}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\ ,j_{sa}^{ik},\mathbb{k}_2,j_{s}\cdots,j_{sa}^{i}\}\wedge$

$s\geq\ =s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\ =\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}})!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=}^{(\boldsymbol{l}_s + j_{sa}^{ik} -} \sum_{=j_{sa}^{ik}+1)}^{} \sum_{a} - j_{sa}^{ik}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{k=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i - \boldsymbol{n} \cdot j^{sa} + \right. j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I)!}{(n_i - \boldsymbol{n} - I)! \cdot (n - 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

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$j_{sa}^{ik} \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \le D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j_{sa}+j_{sa}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=n_{ik}+\mathbb{k}_1}^{n} \sum_{(n_{ik}=\boldsymbol{n}-j^{sa}-\mathbb{k}_2-j_{ik}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\quad - j^{sa})!}$$

$$\frac{(\boldsymbol{l}_{\quad} - \boldsymbol{l} - j_{sa})}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + \quad)! \cdot (j_{ik} - j_{sa}^{ik} \quad)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} \quad \boldsymbol{l}_{\quad} - j_{sa})}{(j_{ik} + \boldsymbol{\quad sa} - j^{sa} - \boldsymbol{l_{ik}} \quad)! \cdot (j^{sa} \quad - j_{sa})!} \cdot$$

$$\frac{(\quad + j_{sa} - \quad - s)!}{\quad + j^{sa} - \boldsymbol{n} - \quad)! \cdot (\boldsymbol{n} \quad a - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \quad_{\boldsymbol{i}} \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{\boldsymbol{l}}^{(\quad -s-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{s}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-\mathbb{k}_1-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{sa}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}+j_{sa}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\colon \left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z\colon z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$S_{j_{ik},j^{sa}} \sum_{j_{sa}^{ik}=\max(0,j_{ik}+j_{sa}-j^{sa})}^{\min(j_{ik},j_{sa})} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{\boldsymbol{i}=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(\quad-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\quad)!}{(\boldsymbol{l_i}-j_{ik}-\quad-1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+\quad-\boldsymbol{l_{ik}}-\quad)!}{(j_{ik}+\quad-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D-j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

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$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$
{}_{fz}S_{j_{ik}{}^{sa}} = \sum_{k=\boldsymbol{l}}^{\quad (\boldsymbol{n}+j_{sa}^{ik}-D-1)} \sum_{(j_{ik}=j_{sa}+1)}^{\quad \boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\quad (n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{\quad n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{\quad n_{sa}=\boldsymbol{n}-j^{sa}+1}
$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-1)!}{(\boldsymbol{l_i}-j_{ik}-1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-1)!}{(j_{ik}+j_{sa}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j \quad \mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\quad-2\cdot j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot(\quad-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}\quad-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}\quad \wedge \boldsymbol{l_i}\quad -s>\quad \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_{sa}}\quad s-\boldsymbol{n}-j_{sa} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq \quad -1 \wedge j_{sa}^{ik}\quad -1 \wedge j_{sa}^{s}<\quad \wedge$

$\boldsymbol{s}\{j_{sa}^{s},\cdots,\mathbb{k}_1,\quad \mathbb{k}_2,j_{sa},\quad j_{sa}^{i}\} \wedge$

$s \geq \quad \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$_{z}: z=\quad \mathbb{k}=\mathbb{k}_1+\mathbb{k}\quad \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+1}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{sa}^{j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{(n_{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D}$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}}^{\mathbb{k}_1}$$

$$\frac{\left(n_i+2\cdot j^{sa}-2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}\ \wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\ \leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j\ \ j_{sa}^{ik}\wedge$

$j_{ik}+j_{sa}\ \ j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\ =\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=}^{n_{ik}+j_{ik}-j^{sa}-} {}_{-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_2 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa}}{{}_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j^{sa} - \boldsymbol{l_{sa}} - s)!}{(D - j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}
$$

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$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$$

$$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)}^{} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\ \ -2\cdot j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot(\ \ -1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\ \ )!\cdot(\boldsymbol{n}\ \ -j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}\ \ \wedge \boldsymbol{l_i}\ \ -s>\ \ \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}\ \ -\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq\ \ -1 \wedge j_{sa}^{ik}\ \ -1 \wedge j_{sa}^{s}<\ \ \wedge$

$\boldsymbol{s}\ \ _{sa}^{s},\cdots,\mathbb{k}_1,\ \ \mathbb{k}_2,j_{sa},\ \ j_{sa}^{i}\} \wedge$

$s \geq\ \ \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$_{\boldsymbol{z}}: z=\ \ \mathbb{k}=\mathbb{k}_1+\mathbb{k}\ \ \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{\boldsymbol{k}=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right)}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-{}^{a}-s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-}$$

$$\sum_{}^{(-j_s+1)}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}\,(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ \ )}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{-}-2\cdot j_{sa}^{}-tk-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big(\big(D\geq \boldsymbol{l}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq \boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\big)\vee$$

$$\big(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+\boldsymbol{l_{ik}}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (\boldsymbol{n} - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{sa} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik}$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (\boldsymbol{}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}}$$

$$\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+1}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \quad)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\left(D > \quad n \wedge \boldsymbol{l} \neq \quad_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge\right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

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$\boldsymbol{l_i} \le D + s - \boldsymbol{n}) \vee$

$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l} \ne {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \le D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \le D + s - \boldsymbol{n})\big) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j^{\dots}_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{\dots}-j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{} \sum_{=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\right.}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}\right.\cdot j_{ik}-s-2}.$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-)!}{(\boldsymbol{l_s}+j_{sa}\ j_{ik})!\cdot(j_{ik}\ j_{sa}^{ik}-1)!}.$$

$$\frac{(D-}{(D+j^{sa}+s-\boldsymbol{n}-\ -j_{sa})!\ +j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l}\ \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}\ \boldsymbol{l_{ik}} \wedge \boldsymbol{l}\ +j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n}\ \boldsymbol{l}_{\boldsymbol{i}} \leq D+\ +s-\boldsymbol{n}-1)$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l}\ \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\ +1 \wedge$

$j_{sa}^{ik} \leq\ \leq j^{sa}+j_{sa}^{ik}\ a \wedge$

$j_{ik}+j_{sa}-\ \leq j^{sa} \leq\ +j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}\ _{sa}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\ <\boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\Big) \wedge$

$D\ \ \leq n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}<j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(\boldsymbol{l_{sa}} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}\sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{(\ \ )}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\left(n_{is}=\right.}^{(n_i\ \ +1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}-2\cdot j_{ik}-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+\ldots+j_{sa}^{ik}-2\ldots_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{\ldots-\boldsymbol{l}-1)!}{\ldots+j_{sa}^{ik}-\ldots-\boldsymbol{l})!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+\ldots-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\ldots\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\ldots+1\wedge$

$j\ldots\leq j_{ik}\leq j\ldots+j_{sa}^{ik}-j\ldots\wedge$

$j_{ik}\ldots j_{sa}-j_{sa}^{ik}\leq j\ldots\leq\boldsymbol{n}+j_{s}\ldots\wedge$

$\boldsymbol{l}\ldots-j_{sa}^{ik}\ldots1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}\ldots j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+s-\boldsymbol{n}<\ldots<D\ldots\boldsymbol{s}+s-\boldsymbol{n}-1)\vee$

$(D\geq\boldsymbol{n}<\ldots\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\ldots{}^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\Big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{sa}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D}\sum_{j^{sa}=j_{ik}+j_{sa}-j_s}$$

$$\sum_{n_i+\mathbb{k}\,(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(\quad-j_s+1)}$$

$$\sum_{n_{is}+j_{sa}^{s}-j_{sa}^{ik}\,\mathbb{k}_1\,(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i+2\cdot j^{sa}-2\cdot j_{sa}^{ik}-j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\left(D\geq\boldsymbol{n}\quad n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\ \boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge\right.$$

$$j_{sa}^{ik}\leq\quad\leq j^{sa}\quad j_{sa}\wedge$$

$$j_{ik}+j_{sa}-\quad{}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$-j^{ik}\quad 1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$$

$$\boldsymbol{l_i}\leq D+s-\boldsymbol{n})\vee$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n})) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}^{ik}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+j_{sa}-j_{sa}^{ik}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}-j_{ik}+\mathbb{k}_2)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l}_{\quad}-\boldsymbol{l}-j_{sa})}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+\quad)!\cdot(j_{ik}-j_{sa}^{ik}\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}\quad\quad-j_{sa})}{(j_{ik}+\boldsymbol{\quad sa}-j^{sa}-\boldsymbol{l_{ik}}\quad)!\cdot(j^{sa}\quad\quad-j_{sa})!}\cdot$$

$$\frac{(\quad+j_{sa}-\quad-s)!}{\quad+j^{sa}-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}\quad_a-j^{sa}-s)!}\ -$$

$$\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)}\ \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(\quad)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_{i} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_{i} - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{sa} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=j_{sa}+2}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\left. \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \right.
$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(j_{ik}-\boldsymbol{l}+1)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=j_{sa}^{ik}+2}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}_{ik}-\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_2+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-1)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{j^{sa}=j_{sa}+1}^{}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\quad-2\cdot j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot(j_{ik}^{\quad}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\quad-j_{sa})!\cdot(\boldsymbol{n}^{\quad}-j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} \quad \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge \quad < j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s} \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2 \quad , \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s \quad \mathbb{k} \wedge$

$\mathbb{k}_z \quad = 2 \wedge \mathbb{k} = \mathbb{k}_1 \quad \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

$$\left.\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\right.$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)\cdot$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}-\boldsymbol{l}+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}+1)}\sum_{n_{ik}+j_{ik}-\mathbb{k}_2}^{n_{ik}+j_{ik}-\mathbb{k}_2}\sum_{j^{sa}=\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_{ik}-n_{ik}}{(j_{ik}-2)!\cdot(n_{ik}-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{-n_{sa}-1)!}{j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j^{sa}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=j_{sa}^{ik}+1)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{s}$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D +$ $\boldsymbol{n})\Big) \wedge$

$D \geq$ $< n \wedge I =$ $0 \wedge$

j_{s} $\leq j_{sa}^{i} - 1$ $_{a}^{ik} = j_{sa}$ $1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}$: $\{$ $, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_{}$ $_{a}, \cdots, j_{s}$ $\}$

$\geq 5 \wedge$ $= s + \mathbb{k} \wedge$

$\mathbb{k}_z$: $z = 2 \wedge \mathbb{k}$ $\mathbb{k}$ $_2 \Rightarrow$

$$_{fz}S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right)}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\quad-j_{sa}\right)!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\quad+j_{sa}-j^{sa}-)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(l_s+j_{sa}^{ik}-\boldsymbol{l})}\ \sum_{(\quad-j_{sa}^{ik}+1)}^{\quad}\quad_{a}-j_{sa}^{ik}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+\cdot j^{sa}+\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\quad+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\ldots\boldsymbol{n}\ldots\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D\ldots\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$

$j_{sa}^{s}-j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik}\wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-} \sum_{j^{sa}=\boldsymbol{l_{sa}}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{}\sum_{}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_{ik}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_{ik}-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}+n_{sa}-1)!}{(j^{sa}-j_{ik}+n_{sa})!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-\quad^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l}$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_{ik}}+$ $-\boldsymbol{n}-j_{sa}^{ik}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge$ $< j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{s}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \quad j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

s $5 \wedge \boldsymbol{s} =$ $\mathbb{k} \wedge$

$\mathbb{k}_z$ $= 2 \wedge \mathbb{k} = \mathbb{k}_1$ $\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\left.\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot\right.$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l}+\boldsymbol{n}-D}^{}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right)} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - \right. - j_{sa})!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\quad + j_{sa} - j^{sa}}\Big) -$$

$$\sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}\right.}^{\left(\quad+j_{sa}^{ik}-\boldsymbol{l}\right)} \sum_{\quad -D-s)} j^{\quad a-j_{sa}^{ik}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_s+1)}$$

$$\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\left(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)}^{(\quad)}$$

$$\frac{\left(n_i + \quad j^{sa} + \quad \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \quad + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \quad \boldsymbol{n} \quad \wedge \boldsymbol{l} \neq \quad _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq \quad a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_{ik}, j^{sa}} = \sum_{=\boldsymbol{l}} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s}^{\boldsymbol{l_i} + j_{sa} - \boldsymbol{l} - s + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})\ j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ \ )} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-\cdot j_{ik}-s-\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-)!}{\left(\boldsymbol{l_s}+j_{sa}-j_{ik}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-}{(D+j^{sa}+s-\boldsymbol{n}-\ -j_{sa})!\ +j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+\ -s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l}\ j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq\ +\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}\ \wedge$

$D\geq\boldsymbol{n}<n\wedge I\ \mathbb{k}>0\wedge$

$j_{sa}\leq j_{}-1\wedge j_{sa}^{ik}=\ -1\wedge j_{sa}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\{j_{sa}^{s},\cdots,\ j_{sa}^{ik},\mathbb{k}_2,j_{s}\cdots,j_{sa}^{i}\}\wedge$

$s\geq\ s=s+$

$\mathbb{k}_z\colon z=2\wedge\ =\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}})!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(\boldsymbol{l_{ik}} + \boldsymbol{n} - \mathbb{k})}^{} \sum_{} j_{sa} - j_{sa}^{ik}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i - j_s + 1)} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik})}$$

$$\sum_{k = n_{is} + j_{sa}^{s} - j_{sa}^{ik} - \mathbb{k}_1}^{(\ \ )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{\left(n_i \cdot 2 \cdot j^{sa} + j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I) \cdot (n \cdot 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D > \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \boldsymbol{_i l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq \boldsymbol{n} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+} \sum_{j^{sa}=\boldsymbol{l_i}+}^{} {}_{j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{(n_i-j_{ik}-\mathbb{k}_1+)} \sum_{n_{sa}=\boldsymbol{n}-j}^{n_{ik}+j_{ik}} {}^{j^{sa}-\mathbb{k}_2}_{+1)}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-\ )}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-\boldsymbol{l}}^{\boldsymbol{l_s}+\ -\boldsymbol{l}}$$

$$\sum_{n_i=\ +\mathbb{k}\,(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{-j_s+1)}$$

$$\sum_{n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1\,(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}-2\cdot j_{sa}^{ik}-j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\ -I)!\cdot\left(\boldsymbol{n}+\ \cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < \ \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \ \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{\ \ ik}\ j_{sa} \wedge$

$j_{ik}+j_{sa}\ \ ^{ik}_{a} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}\ \ > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\} \wedge$

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$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(j_{ik} + j^{sa} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_i} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + \boldsymbol{l_i} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{\left(j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa}\right.}^{} \sum_{\left.j_{ik} + j_{sa} - j_{sa}^{ik}\right)}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}^{(n_i - j_s} \sum_{\left(n_{is}\right.}^{+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{n_{ik}=n_{is}+j_s}^{j_{sa}^{ik}-\mathbb{k}_1} \sum_{(}^{-n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} \right. \cdot j_{sa}^{ik} - 2 \cdot j_{i} - s - 2 \cdot j_{sa} - I)!}{(n_i - \left.\right)(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{} - s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l}_{} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

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$\boldsymbol{l_{ik}} \le D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \le D + s - \boldsymbol{n}\big)\big) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{sa}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{is}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )} \sum_{j^{sa}=j_{sa}+1}^{n_i-j_s+1}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=j_{sa}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j_{ik}, j^{sa} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{(\ )} \sum_{j^{sa} = j_{sa}+1}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ \ )}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}}^{(\ \ )}\sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}+\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-\boldsymbol{n}-j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(n_{is}+2\cdot j^{sa}+\boldsymbol{n}+j_{sa}-2\cdot j_{ik}-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+\boldsymbol{l_i})!}{(D+j^{sa}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\ \leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+\ -j_{sa}^{ik}\leq j^{\ }<\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\ \wedge\boldsymbol{l_{sa}}+\ -j_{sa}=\boldsymbol{l_{ik}}\wedge$$

$$D+\ -\boldsymbol{n}<\boldsymbol{l_{ik}}\leq\ +\boldsymbol{l_s}+\ -\boldsymbol{n}-1)\vee$$

$$(D\geq\boldsymbol{n}<\ \wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\ \leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq\ \leq j^{sa}+\ -j_{sa}\wedge$$

$$j_{ik}+j_{sa}-\ \leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$-j^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\big)\wedge$$

$$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$$

$$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+} \sum_{=\boldsymbol{n}} \sum_{+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(j_{ik} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_{sa}}+s-\boldsymbol{n}-j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \wedge \boldsymbol{l_i}+j_{sa}- = \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1) \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}- \quad j_{sa}^{s} < j_{sa}^{ik}-$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = + \mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k} = + \mathbb{k}_2 =$

$$fzS_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=j_{sa}^{ik}}\sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{(}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(\quad-n_{ik}-\quad-1)!}{(j_{ik}-2)!\cdot(\quad-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{\quad}-n_{sa}-1)!}{{}^{sa}-j_{ik}\quad)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum^{(\ )}_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-\quad^{sa}-s)!}$$

$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\ \ ^{ik}\wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_{sa}}+s\quad\quad)\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\quad D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+\quad-j_{sa}^{ik}\leq j^{\quad}<\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\quad\wedge\boldsymbol{l_{sa}}+\quad^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+\quad-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq\quad+\boldsymbol{l_s}+\quad-\boldsymbol{n}-1)\big)\wedge$

$\geq\boldsymbol{n}<\quad\wedge I=\mathbb{k}>(\quad\wedge$

$j_{sa}\leq j_{\quad}-1\wedge\quad_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\quad j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$>5\wedge\quad s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{\boldsymbol{l}=1}^{(\boldsymbol{l_s}+j_{sa}^{ik})} \sum_{(j_{ik}=\boldsymbol{l_{sa}}-\boldsymbol{l}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-\cdot j_{ik}-s-\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-)!}{\left(\boldsymbol{l_s}+j_{sa}-j_{ik}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-)!}{(D+j^{sa}+s-\boldsymbol{n}-\quad-j_{sa})!\quad+j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _i\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}\leq \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}} \leq +\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l}\neq \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-+1 \wedge$

$j_{sa}^{ik} \leq \leq j^{sa}+j_{sa}^{ik}- \wedge$

$j_{ik}+j_{sa}-\leq j^{sa} \leq +j_{sa}-s \wedge$

$\boldsymbol{l_{sa}}-+1>\boldsymbol{l_s} \wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$<\boldsymbol{l_i} \leq D+\boldsymbol{l_{sa}}+s-\boldsymbol{n}-j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _i\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

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$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{\cup}j^{sa} = \sum_{k=\boldsymbol{l}}^{j_{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j_{ik}=\boldsymbol{l}+\boldsymbol{n}-D)}^{j_{ik}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{sa}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(\quad-1)!}{(n_{\quad}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{s}}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}}{(\quad-j_{ik}-\quad+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\quad-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{s}-\boldsymbol{l_{sa}}-s)!}{(D-j^{sa}-\quad\boldsymbol{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

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$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}$ $_{sa} - s \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} +$ $- \boldsymbol{n} - 1)$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq$ $\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n}$ $1 \wedge$

j $\leq j_{ik} \leq j$ $+ j_{sa}^{ik} -$ $\wedge$

j_{ik} $j_{sa} - j_{sa}^{ik} \leq j$ $\leq \boldsymbol{n} + j_s$ $\wedge$

$\boldsymbol{l_{ik}} - j_{sa}$ $1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}$ $j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n}$ $< \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

D $\boldsymbol{n} <$ $\wedge I = \mathbb{k} > 0 \wedge$

j_{sa} $\leq j_{sa}^{i}$ $\wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{n}-j^{sa}-\boldsymbol{l_{ik}})!\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{\left(j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s\right)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_{is} = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{\left(n_{is} = \right.}^{(n_i + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1}^{(\ )} \sum_{} \left(n_{ik} - j^{sa} - \mathbb{k}_2\right)$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa} - 2 \cdot j_{ik} - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + \right. j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\ - \boldsymbol{l} - 1)!}{\left(+ j_{sa}^{ik} - \right) - \boldsymbol{l})! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + \ - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \ \ \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \ \ 1 \wedge$

$j_{sa} \leq j_{ik} \leq j^{ \ } + j_{sa}^{ik} - j_{ \ } \wedge$

$j_{ik} \ j_{sa} - j_{sa}^{ik} \leq j^{ \ } \leq \boldsymbol{n} + j_{sa} \ \ \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} \ 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} \ \ j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa}^{ik} - \boldsymbol{n} < \ \ \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < \ \ \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$_{ik} \leq j_{ik} \ \ ^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$

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$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$
{}_{fz}S_{j_{ik},j} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{}
$$

$$
\sum_{i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\boldsymbol{\quad}-2\cdot j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot(j_{ik}^{\quad}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}^{\quad}_{\quad a}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik}$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge$ $< j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s$ $\mathbb{k} \wedge$

$\mathbb{k}_z \cdot$ $= 2 \wedge \mathbb{k} = \mathbb{k}_1$ $\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}} \right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}-s)!}\right)+$$

$$\left(\sum_{k=\ {}_i\boldsymbol{l}}\ \sum_{(j_{ik}=j_{sa}^{ik})}^{(\ \ )}\ \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{sa}}-\ {}_i\boldsymbol{l}+1}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}\ [illegible]\ j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=[illegible]+1}^{n_{ik}+[illegible]-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}\ [illegible]\ \mathbb{k}_1-1)!}{(j_{ik}-[illegible])!\cdot(n_i-n_{ik}\ [illegible]-\mathbb{k}_1+1)!}\cdot$$

$$\frac{([illegible]-n_{sa}\ [illegible])!}{(j^{sa}-[illegible]-1)!\cdot([illegible]+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}\ [illegible]\ 1)!}{(n_{sa}+[illegible]-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}\ [illegible]\ j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(\boldsymbol{l_{sa}}\ [illegible]-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}-j_{sa})!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+[illegible]-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)-$$

$$\sum_{k=\ {}_i\boldsymbol{l}}\ \sum_{(j_{ik}=j_{sa}^{ik})}^{(\ \ )}\ \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ \ )}\ \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\boldsymbol{n}\right)!}{(n_i-\boldsymbol{n}-\boldsymbol{n})!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ {}_i\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \leq D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_Z S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l_i}}^{(\quad)} \sum_{j_{ik}=j^{sa}+\boldsymbol{l_{sa}}-\boldsymbol{l_i}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l_i}+} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\quad+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - \quad l_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{s} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \quad_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \quad_{\boldsymbol{i}}\boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\quad_{\boldsymbol{i}}\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \boldsymbol{n}\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n})! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\sum_{j_{ik}, j^{sa}} \sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{\left(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}\right)}^{\boldsymbol{l_{sa}} - \ _{\boldsymbol{i}}\boldsymbol{l} + 1} \sum_{j^{sa} = j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{\left(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1\right)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \ _{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \ _{\boldsymbol{i}}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} -$$

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$$\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \boldsymbol{n}\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n})!\cdot\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - \quad - 2\cdot j_{sa}\right)}\cdot$$

$$\frac{(D - \boldsymbol{l}_{\boldsymbol{i}}}{(D + s - \boldsymbol{n}\quad)!\ \boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l}_{\boldsymbol{s}} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l}_{\boldsymbol{k}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \quad j_{sa} < j_{sa} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots \right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z \quad 2 \wedge \mathbb{k} = \mathbb{k}_1 \quad \mathbb{k}_2 \Rightarrow$

$$_{j_z}S_{j_{ik},j^{sa}} = \sum_{k=\ _{i}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\ _{\boldsymbol{i}}\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)!\cdot(n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}\cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)!\cdot(n_{ik} + j_{ik} - n_{sa} - j^{sa})!}\cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)!\cdot(\boldsymbol{n} - j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_{ik}} - {}_{i}\boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - {}_{i}\boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} -$$

$$\sum_{k={}_{i}\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{s}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_{1}+1)} \sum_{n_{sa}=n_{ik}} {}^{sa}-\mathbb{k}_2$$

$$\frac{(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s \quad 2 \cdot j_{sa} - \boldsymbol{n})!}{(n_i - \boldsymbol{n} - \boldsymbol{n})! \cdot (\boldsymbol{n} + 2 \cdot j^{sa} \quad {}^{ik} - 2 \cdot j_{ik} \quad s - 2 \cdot j_{sa})!}$$

$$\frac{(}{(D \quad - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} \quad {}_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \quad > 0 \wedge$

$j \quad \leq j_{sa}^{i} - \quad j_{sa}^{ik} = j_{s} \quad - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \quad j_{sa}, \cdots, j \quad \}$

$s \geq 5 \wedge \quad = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \quad \mathbb{k}_1 + \quad \Rightarrow$

$$fz S_{j_{ik}, j^{sa}} = \sum_{k={}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - {}_{i}\boldsymbol{l} - j_{sa} + 1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-{}_{i}\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right.}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}-s)!}$$

$$\sum_{k=}^{(\ )}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}(}^{n}\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\boldsymbol{n}\right)!}{(n_i-\boldsymbol{n}-\boldsymbol{n})!\cdot\left(\boldsymbol{n}-2\cdot j^{sa}+2\cdot j_{sa}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D$ $\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}-j_{sa} \wedge$

$j_{sa}+j_{sa}-j_{sa} < j^{sa} \leq$ $+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik}+1 > \boldsymbol{l_s}$ $+j_{sa}^{ik}$ $= \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n}$ $\wedge I = \mathbb{k} >$ $\wedge$

$j_{sa} \leq j_{sa}^{i}-1$ $^{ik}-$ $-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}$: $_{sa},\cdots,$ $, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s}$ $s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}$$

$$\frac{\left(\boldsymbol{l_{ik}}\quad_{\boldsymbol{i}}\boldsymbol{l}-j_{sa}^{\quad}\right)}{\left(\boldsymbol{l_{ik}}-j_{ik}-\ _{\boldsymbol{i}}\boldsymbol{l}+\quad\right)\cdot\left(j_{ik}-j_{sa}^{ik}\quad\right)!}\cdot$$

$$\frac{j_{sa}-\boldsymbol{l}_{\boldsymbol{s}}-s)!}{(D+\quad-\boldsymbol{n}\quad)!\quad-s)!}\ -$$

$$\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\quad\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i\quad 2\cdot j^{sa}+2\quad j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\boldsymbol{n}\right)!}{(n_i-\boldsymbol{n}-\boldsymbol{n})\quad\left(\boldsymbol{n}\quad 2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}\quad n\wedge\boldsymbol{l}=\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\quad\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq\quad+j_{sa}^{ik}-\quad a\wedge$

$j_{ik}\quad j_{sa}\quad j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\quad>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$

$\boldsymbol{l_{ik}}\quad+j_{sa}^{ik}-\boldsymbol{n}\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\ {}_{\boldsymbol{i}}\boldsymbol{l}}^{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\ {}_{\boldsymbol{i}}\boldsymbol{l}-j_{sa}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=}^{n_{ik}+j_{ik}-j^{sa}-}
$$

$$
\frac{(n_i - n_{ik} - \quad 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \quad + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} \quad 1)!}{(j^{sa} - j_{ik} \quad + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa}-1)}{(\quad + j^{sa} \quad \boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j^{sa})!} \cdot
$$

$$
\frac{(\quad - \ {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik})!}{\boldsymbol{l_k} - j_{ik} - \quad + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{+ j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n}-s)!} -
$$

$$
\sum_{k=\ {}_{\boldsymbol{i}}\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik})}^{(\ )} \sum_{j^{sa}=j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \boldsymbol{n}\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n})! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}-s)!}
$$

$$
\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge
$$

$$
j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge
$$

$$
j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge
$$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{\boldsymbol{z}} \sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l}+1\right)} \sum_{\left(j_{ik}=j_{sa}^{ik}\right)} \sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{sa}} - {}_{\boldsymbol{i}}\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1\right)}^{\left(n_i-j_{ik}-\mathbb{k}_1+1\right)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \boldsymbol{n}\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n})!\cdot\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - \quad - 2\cdot j_{sa}\right)}\cdot$$

$$\frac{(D - \boldsymbol{l_i}}{(D + s - \boldsymbol{n}\quad)!\ \boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \vee j_{sa} < j_{sa} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, \right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\sum_{j_{ik}, j^{sa}} = \left(\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{ik}}+j_{sa}-\ _{\boldsymbol{i}}\boldsymbol{l}-j_{sa}^{ik}+1} \right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)!\cdot(n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}\cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)!\cdot(n_{ik} + j_{ik} - n_{sa} - j^{sa})!}\cdot$$

$$\left.\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)!\cdot(\boldsymbol{n} - j^{sa})!}\cdot\right.$$

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$$\frac{(\boldsymbol{l_{ik}} - {}_{i}\boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - {}_{i}\boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!}\Bigg) +$$

$$\Bigg(\sum_{k={}_{i}\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)\,\boldsymbol{l_{ik}}+j_{sa}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \quad - 1)!}{(j_{ik} - \quad - n_{ik} - \quad - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (\quad + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} \quad 1)!}{(n_{sa} + j \quad - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!}$$

$$\frac{(\quad - {}_{i}\boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - {}_{i}\boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\quad + j \quad - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k={}_{i}\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-{}_{i}\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-{}_{i}\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)\cdot$$

$$\sum_{k=}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=j}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}}\sum_{-j_{ik}-\mathbb{k}_1}\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+2\cdot j_{sa}^{ik}-2\cdot j_{sa}^{ik}-2\cdot j_{sa}-s-j_{sa}-\boldsymbol{n}\right)!}{(n_i-\boldsymbol{n}-\boldsymbol{n})!\cdot\left(\boldsymbol{n}-2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D$ $j_{sa}-\boldsymbol{n}\wedge$

$j_{sa}^{ik} \leq$ $\leq j^{sa}+j_{sa}$ $j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}$ $1 \leq j^{sa}$ $\boldsymbol{n}+j_{sa}$ $s\wedge$

$\boldsymbol{l_{ik}}$ $_{sa}^{ik}+1>\boldsymbol{l_s}\wedge$ $+j_{sa}^{ik}$ $_{sa}>\boldsymbol{l_{ik}}\wedge$

$\geq \boldsymbol{n} <$ $\wedge I=\mathbb{k}>$

$j_{sa} \leq j$ $-1\wedge j$ $_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}$: $\{j_{sa}^{s},\cdots,$ $j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$>5\wedge$ $s+\mathbb{k}\wedge$

$\mathbb{k}_z: z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k={}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}+1\right)}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-{}_{\boldsymbol{i}}\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-{}_{\boldsymbol{i}}\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(j_{sa}+\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-s)!}\Bigg)+$$

$$\left(\sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}}-{}_{\boldsymbol{i}}\boldsymbol{l}\right)}\ \sum_{(j_{ik}=j_{sa}^{ik})}^{l_{sa}-{}_{i}l+1}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{}\right.$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-{}_{\boldsymbol{i}}\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-{}_{\boldsymbol{i}}\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

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$$\sum_{k=\ {}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \boldsymbol{n}\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n})! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - \quad - 2 \cdot j_{sa}\right)} \cdot$$

$$\frac{(D - \boldsymbol{l_i}}{(D + s - \boldsymbol{n} \quad)! \quad \boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - \quad > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - \quad \wedge j_{sa}^{s} < j_{sa}^{ik} -$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\}$

$s \geq 5 \wedge \boldsymbol{s} = z + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \quad + \mathbb{k}_2$

$$fzS_{j_{ik},j^{sa}} = \sum_{k=\ {}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}-s)!}\ -$$

$$\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=j_{}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}\sum_{n_{sa}}\sum_{j_{ik}}^{sa-\mathbb{k}_2}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\boldsymbol{n}\right)!}{(n_i-\boldsymbol{n}-\boldsymbol{n})!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{}-s-2\cdot j_{sa}\right)}\cdot$$

$$\frac{}{(D-s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n})\Big)\wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{i}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_2}
$$

$$
\frac{(n_i \quad n_{ik} - \mathbb{k}_1}{(j_{ik} \quad 2)! \cdot (n_i \quad n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(\quad - n_{sa} \quad 1)!}{a - j_{ik} - 1)! \quad n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(\quad j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot (j^{sa} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{i}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \boldsymbol{n}\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n})! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}
$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

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$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}})) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$j^{\{j_{ik}, j^{sa}\}} \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\left. \frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot \right)$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\Bigg(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(j_{ik} + j^{ik}_{sa} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + j^{sa} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik}+1}\sum_{\boldsymbol{l}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}(n_{is}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\big((D\geq \boldsymbol{n}<n\wedge \boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+2\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\boldsymbol{l}=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\big)\vee$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+2\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}\big)\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{(j_{ik}-\mathbb{k}_1+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_{sa}-j_{ik}+1)}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \overset{(\ )}{\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-\quad^{sa}-s)!}$$

$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\big)\big)\wedge$

$D\geq\quad<n\wedge I=\mathbb{k}_1=0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}^{s}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s}+\mathbb{k}_1,j_{sa}^{ik},\quad_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s\geq 5\wedge\boldsymbol{s}\quad+\mathbb{k}\wedge$

$\cdot z=2\quad\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$fzS_{j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik} \quad +\boldsymbol{n}-D)}^{+\boldsymbol{n}+j_{sa}^{ik} \quad j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\right.$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i- \quad -\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-\quad-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(\quad-1)!}{(n_{\quad}+j^{sa}-\boldsymbol{n}-\quad1)!\cdot(\boldsymbol{n}-j^{sa}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\quad)!}{(\quad-j_{ik}-\quad+1)!\cdot(j_{ik}-\quad-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+\quad-\boldsymbol{l_{ik}}-\quad)!}{(j_{ik}+\quad-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D} \right.
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - 1)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

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$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$$

$$D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 2 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} \; ik - \boldsymbol{l})} \sum_{(j_{ik} = \; \boldsymbol{n} + j_{sa}^{ik} - D - 1)} \sum_{j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D}^{\boldsymbol{l_{sa}} \; \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j \; \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{i}^{}}^{(\ )} \sum^{j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{s}^{}\right.}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-\right.\cdot j_{ik}-s-2\cdot)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-}{\left(\boldsymbol{l_s}+j_{sa}^{i}-j_{ik}-\right.(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l}}{(D+j^{sa}+s-\boldsymbol{n}-\cdot j_{sa})!\cdot+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\cdot j_{sa}-1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-\cdot-1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+\cdot \leq j^{sa} \leq \boldsymbol{n}+\cdot-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}+\cdot=\boldsymbol{l_s} \wedge \cdot+j_{sa}^{ik}-j_{sa}>$

$D \geq \boldsymbol{n} < n \wedge \cdot-\mathbb{k}>0 \wedge$

$j_{sa} \leq \cdot-1 \wedge j_{sa}^{ik}<\cdot-1 \wedge j_{sa}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, \cdot \cdots, \mathbb{k}_2, j_{s}\cdots, j_{sa}^{i}\} \wedge$

$s \geq \cdot=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \cdot=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{\,j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - D - j_{sa})} \sum_{(j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - 1)}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + \boldsymbol{n} - D}^{}\right.$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} - j_{sa} - j_{ik} + 1)}^{n_i - j_{ik} - \mathbb{k}_2} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa})}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}^{}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\quad - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa})}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + \quad)! \cdot (j_{ik} - j_{sa}^{ik} \quad)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} \quad \boldsymbol{l_{ik}} - j_{sa})}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}} \quad)! \cdot (j^{sa} \quad - j_{sa})!} \cdot$$

$$\frac{(D \quad j_{sa} - \boldsymbol{l_s} \quad - s)!}{(\quad + j^{sa} - \boldsymbol{n} - \boldsymbol{l_s} \quad)! \cdot (\boldsymbol{n} + \quad - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{ik}-\boldsymbol{l})} \sum_{(j_{ik}-\boldsymbol{l}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(\quad)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\quad}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(\quad)}^{(\quad)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2 \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(\quad - \mathbb{k}_2 - 1)!}{(j^{sa} - \quad - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\quad}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\quad}
$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$j_{\dots, j^{sa}} = \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{(\ )} \sum_{j^{sa} = \boldsymbol{l_{ik}} + \boldsymbol{n} + j_{sa} - D - j_{sa}^{ik}}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-\cdot j_{ik}-s-\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-)!}{\left(\boldsymbol{l_s}+j_{sa}-j_{ik}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-)!}{(D+j^{sa}+s-\boldsymbol{n}-\quad-j_{sa})!\quad+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+$ $-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 \geq \boldsymbol{l}$ $\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j$ $=\boldsymbol{l_{ik}} \wedge$

$D \geq$ $< n \wedge I=\mathbb{k}$ $0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge$ $< j_{sa}$ $1 \wedge j_{sa}^{s}-$ $_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}$: $\{j_{s}$ $\mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2,$ $, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s}$ $s+\mathbb{k} \wedge$

$\mathbb{k}_z$: z $2 \wedge \mathbb{k}=$ $\mathbb{k}_2 \Rightarrow$

$$fzS_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}}$$

$$\frac{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})!}{(\boldsymbol{n} + j_{sa} - j$$

$$\sum_{(j_{ik}=\boldsymbol{l_i}+$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}$$

$$\sum_{k=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}$$

$$\frac{\left(n_i$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq$ $n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j$ $\leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

j $j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+} \sum_{=\boldsymbol{n}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{}^{n_{ik}+} \sum_{}^{-j^{sa}-\mathbb{k}_2} \sum_{}^{sa}+1
$$

$$
\frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_{ik},j^{sa}} \sum_{\boldsymbol{l}=(j_{ik}-j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s} \sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}^{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-\mathbb{k}_1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-1)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-1)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{sa}^{ik}}^{j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{} \sum_{n_{ik}=\mathbb{k}_1+\mathbb{k}(n_{ik}=\boldsymbol{n}-j_{ik}+1)}^{n} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(n_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa})}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+\quad\cdot(j_{ik}-j_{sa}^{ik}\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}\quad\boldsymbol{l}_{\quad}-j_{sa})}{(j_{ik}+\boldsymbol{\quad_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\quad\cdot(j^{sa}\quad\quad-j_{sa})!}\cdot$$

$$\frac{(\quad+j_{sa}-\quad-s)!}{+j^{sa}-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}\quad_{a}-j^{sa}-s)!}\ -$$

$$\sum_{\boldsymbol{l}=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}}\ \sum_{(j_{ik}-\quad\quad-D-j_{sa})}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j_{ik}, j^{sa} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{(\ )} \sum_{j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ \ )}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}}^{(\ \ )}\sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}+\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(n_i+2\cdot j^{sa}+j_{sa}-2\cdot j_{ik}-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\left((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge\right.$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\vee$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\vee$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\left.\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\right)\wedge$$

$$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{sa}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\big)\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$\sum_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}\right.}^{(n_i}$$

$$\sum_{n_{ik}=n_{is}+j_{s}}^{(\ )} \sum_{=n_{ik}}$$

$$\frac{\left(n_i + \boldsymbol{\cdot} j^{sa} + 2 \cdot j_{s} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - 1\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + \cdot j_{sa}^{ik} - \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l} + j_{sa}^{ik} - j_{sa} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + \boldsymbol{\cdot} - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} < j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}}^{n_{ik}+j_{ik}-j^{sa}} \quad -j^{sa}+1
$$

$$
\frac{(n_i \quad -1)}{(j_{ik}-2)! \cdot (n_i - n_{ik} \quad +1)!} \cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2 \quad 1)!}{(j^{sa}-j_{ik}-1)! \quad +j_{ik}-n_{ \quad }-j^{sa}-\mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} \quad)!}{ \quad _{sa}+j^{ \quad }\boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l} \quad _{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik} \quad +1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot
$$

$$
\frac{(D+j \quad -\boldsymbol{l_{sa}}-s)!}{(D \quad ^{sa}-\boldsymbol{n} \quad \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n}+j_{sa}-j^{sa}-s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}
$$

$$
\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!} \cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}
$$

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$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j_{sa}^{ik} - j_{sa})} \; \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \; \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{n} \; \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \; \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \; \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}\sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{s}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i-n_{ik}-1)}{(j_{ik}-2)!\cdot(n_i-\quad-j_{}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\quad-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-\quad-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(\quad-1)!}{(n_{sa}+j_{}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\quad-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}\quad+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}\quad\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\quad-j^{sa}\quad)!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+\quad-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$f_Z S_{j_{ik}} \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\big(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\big)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\big(j_{ik}-j_{sa}^{ik}-1\big)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{}\sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\left(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1\right)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{}^{n_{ik}+}$$

$$\frac{(n_i \quad n_{ik}-1)!}{(\quad -2)!\cdot(n_i \quad _{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-\quad -\mathbb{k}_2 \quad 1)!}{^{sa}-j_{ik}-\quad !\cdot(n_{ik} \quad _{ik}-n_{sa}-j \quad -\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{s} \quad -1)!}{(n_{sa}+ \quad ^{a}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\quad _{k}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} \quad \boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{s}} \quad -j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{}\sum_{\left(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}\right)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \big) \wedge$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\{j_{sa}^{s}, \mathbb{k}_{z}, j_{sa}^{z}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{n}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum^{(n_i}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}}^{(\ )} \sum_{=n_{ik}}$$

$$\frac{\left(n_i + \cdot j^{sa} + 2 \cdot j_{sa} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - 1\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + \cdot j_{sa}^{ik} - \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(j_{ik} + j_{sa}^{ik} - j_{sa} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + \cdot - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{\mathbb{k}}_{j^{sa}} = \sum_{k=\boldsymbol{l}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{(j_{ik}}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{sa}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(\quad - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}}}{(\quad - j_{ik} - \quad + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + \quad - \boldsymbol{l_{ik}} \quad)!}{(j_{ik} + \quad - j^{sa} - \boldsymbol{l_{ik}}) \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{s} \quad \boldsymbol{l_{sa}} - s)!}{(D \quad j^{sa} - \quad \quad)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I)!}{(n_i - \boldsymbol{n} - I)! \cdot (\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\dots,j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(\dots j^{sa}+j_{sa}^{ik}\dots)} \dots \sum_{j^{sa}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}-D-1} \dots
$$

$$
\sum_{\dots+\mathbb{k}} \sum_{(n_{ik}=\boldsymbol{n}\dots-j_{ik}+1)} \dots \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1} \dots
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(\dots_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ \ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-\quad^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}<j_{sa}-1 \wedge j^{s}-j_{sa}^{ik}-1$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \quad j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$j_{ik},j^{sa}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=}^{(n_i}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{(\ )}\sum_{}^{}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}-2\cdot j_{ik}-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\ -\boldsymbol{l}-1)!}{(\ +j_{sa}^{ik}-\ -\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+\ -\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}\geq D-\boldsymbol{n}+1\wedge$

$j_{ik}^{ik}+1\leq j_{ik}<j^{sa}+j_{sa}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j_{ik}\leq\boldsymbol{n}+j_{sa}-\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}-j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge=\mathbb{k}>\wedge$

$j_{sa}^{s}=j_{sa}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,\ ,\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s\geq\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\quad - j^{sa})!}$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - j_{sa})}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + \quad)! \cdot (j_{ik} - j_{sa}^{ik} \quad)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} - s}{(\quad j^{sa} - \boldsymbol{n} - \quad)! \cdot (\quad - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i \quad \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I)!}{(n_i - \quad - I)! \cdot (\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

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$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$
\begin{aligned}
{}_{fz}S_{j_{ik},j^{sa}} = {} & \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-I} \sum_{j^{sa}=j_{ik}+} \\
& \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(} \sum_{-j_{ik}+1)} \sum_{=\boldsymbol{n}-j^{sa}+1} \\
& \frac{(n_i - n_{ik} - j_{ik} + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot \\
& \frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot \\
& \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} - \\
& \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
& \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \\
& \sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \\
& \frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
\end{aligned}
$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{k=\boldsymbol{l}}\sum_{\left(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D\text{[illegible]}\right)}^{\left(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}\right)}\sum_{j^{sa}=\boldsymbol{l_s}+\text{[illegible]}-\boldsymbol{l}+1}^{\text{[illegible]}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\text{[illegible]}-j_{ik}+1)}^{(n_i-j_{ik}-\text{[illegible]}+1)}\sum_{\text{[illegible]}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-\text{[illegible]}\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}\text{[illegible]}}{\text{[illegible]}_{ik}-2)\text{[illegible]}(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-\text{[illegible]}-\mathbb{k}_2\text{[illegible]}1)!}{(j^{sa}-\text{[illegible]}-1)!\cdot(n_{ik}\text{[illegible]}j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}\sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{(\ )}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{\left(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)}^{(\ )}$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} \quad)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge \quad = j_{sa}^{ik} - 1$

$\boldsymbol{s}: \left\{j_s^s, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \quad j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$\boldsymbol{s} \quad 5 \wedge \boldsymbol{s} = \quad \mathbb{k} \wedge$

$\mathbb{k}_z \quad = 2 \wedge \mathbb{k} = \mathbb{k}_1 \quad \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = \boldsymbol{l_s} + \boldsymbol{n} + j_{sa}^{ik} - D - 1)}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1} \sum_{j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{s}}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_i-1)!}{(j_{ik}-1)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-1)!\cdot(j_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)!\cdot\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)!\cdot\left(j_{ik} - j_{sa}^{ik} - 1\right)!}\cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})!\cdot(\quad + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa}$ $\wedge j_{sa}^{s} = j_{sa}^{ik}$ $\wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}$ $\wedge$

$s \geq 5 \wedge \boldsymbol{s} = s +$ $\mathbb{k}$

$\mathbb{k}$ $z = 2 \wedge$ $\mathbb{k}_1 + \mathbb{k}$ $\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)!\cdot(n_i - n_{ik} - j_{ik} + 1)!}\cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)!\cdot(n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)!\cdot(\boldsymbol{n} - j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=j_{sa}^{ik}}\qquad\sum_{j^{sa}=\boldsymbol{l_s}+}^{-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\qquad\sum_{-j_{ik}+1)}^{(n_i-j_{ik}-}\qquad\sum_{=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}}{-j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-\qquad-\mathbb{k}_2-1)!}{(j^{sa}-\qquad-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}\qquad\sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\qquad\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\qquad\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = {}_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$S_{j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1} \sum_{j^{sa} = j_{sa} + 1}^{} \right.$$

$$\left. \sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \right.$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum_{j^{sa}=j_{sa}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(j_{ik}+j^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{ik}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right.}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+1}^{}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}\left(n_{is}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right.}^{(n_i-j_s+} \sum_{}^{}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{} \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} - 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \quad)\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j \quad + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \quad \boldsymbol{l} \wedge \boldsymbol{l_s} \leq \quad - \boldsymbol{n} \quad 1 \wedge$

$j_{sa}^{ik} \leq \quad \leq j^{sa} + j_{sa}^{ik} - \quad a - 1 \wedge$

$j_{ik} + j_{sa} - \quad + 1 \leq j \quad \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} \quad _{sa} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D + \quad - \boldsymbol{n} \wedge$

$\quad n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=j_{sa}+2}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - \quad + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \quad - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - \quad - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\quad - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \quad j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} \quad + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} \quad \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \quad - j^{sa} \quad)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{s} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\big(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\big)!}{(n_i - \boldsymbol{n} - I)! \cdot \big(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\big)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\big(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\big)! \cdot \big(j_{ik} - j_{sa}^{ik} - 1\big)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}$$

$$\frac{(\boldsymbol{l}_{\quad}-\boldsymbol{l}-j_{sa})}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+\quad!\cdot(j_{ik}-j_{sa}^{ik}\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}\quad\boldsymbol{l}_{\quad}-j_{sa})}{(j_{ik}+\boldsymbol{\quad_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\quad!\cdot(j^{sa}\quad-j_{sa})!}\cdot$$

$$\frac{(D\quad j_{sa}-\boldsymbol{l_s}\quad-s)!}{(\quad+j^{sa}-\boldsymbol{n}-\boldsymbol{l}_{\quad}!\cdot(\boldsymbol{n}+\quad-j^{sa}-s)!}\Big)-$$

$$\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\quad-\boldsymbol{l}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \quad_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}} = \left(\sum_{k=} \sum_{} \sum_{j_{sa}^{ik}} \right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (\quad + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j$$

$$\left(\quad\right)$$

$$\sum_{k=} \sum_{=j_{sa}^{ik}+1} \sum_{=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i + \quad j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \quad I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\boldsymbol{\quad} \wedge \boldsymbol{l} \neq \quad_{\boldsymbol{i}} \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$$

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$\boldsymbol{l_{sa}} \le D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \le D + s - \boldsymbol{n} \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}}^{(n_i-j_{ik}-\mathbb{k}_1+1)\ n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_{ik}-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_{ik}-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j_{ik}-j_{ik}-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)!\cdot\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)!\cdot\left(j_{ik} - j_{sa}^{ik} - 1\right)!}\cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})!\cdot(\quad + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge \ _{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{s}^{s} - \mathbb{k}_1, j_{sa}^{ik}, \cdots, \ _{} j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = \ _{} \mathbb{k} \wedge$

$\mathbb{k}_z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}\right.$$

$$\left.\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\right)$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)!\cdot(n_i - n_{ik} - j_{ik} + 1)!}\cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)!\cdot(n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}}^{\qquad -D}\right.+$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{sa}^{ik}-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right)} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - \right. - j_{sa})!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\quad + j_{sa} - j^{sa} \quad)!}\Bigg) -$$

$$\sum_{k} \binom{\quad}{(j_{ik} = j^{sa} + \quad - j_{sa})} j^{sa} \quad j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1 \quad - D - s$$

$$\sum^{n} \quad \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{z = n_{is} + j_{sa}^{s} - j_{sa}^{ik} - \mathbb{k}_1} \binom{\quad}{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{\left(n_i + \quad \cdot j^{sa} + \quad \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \quad + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \quad \boldsymbol{n} \quad \wedge \boldsymbol{l} \neq \quad _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_{ik}} + \quad - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 2 \leq \boldsymbol{l} \leq \quad _{\boldsymbol{i}}\boldsymbol{l} - 1 \wedge$

$j_{sa}^{ik} - j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l}+1)} \sum_{j^{sa}=\boldsymbol{l}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\mathbb{k}_2-j_{ik}+1} \sum_{a=\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i}{(j_{ik}-2)}
$$

$$
\frac{(n_{ik}}{(j^{sa}}
$$

$$
\frac{(n_{sa}-1)!}{(}
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!}
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(}
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!}
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} \quad)!} \cdot$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_i}$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \quad - j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} -$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots_{sa}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \quad + \mathbb{k}_2 \Rightarrow$

$$S_{j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{(\ \ )} \sum_{j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D}^{\boldsymbol{l_s} + j_{sa} - \boldsymbol{l}} \right.$$

$$\left. \sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \right)$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(\boldsymbol{l}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{l=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D}$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{n_{is}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}+\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}-2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\quad-I)!\cdot\left(\boldsymbol{n}+\quad\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\geq \boldsymbol{n} < \quad \wedge \boldsymbol{l} \neq \ _i\boldsymbol{l} \wedge \quad \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l}\quad+j_{sa}-\quad-j_{sa}^{ik}+2 \leq \boldsymbol{l} \leq \ _i\boldsymbol{l}-1 \wedge$

$j_{sa}^{ik} \leq j_{ik}-\quad^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$\quad+j_{sa}\quad_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{=\boldsymbol{n}}^{n_{ik}+ -j^{sa}-\mathbb{k}_2} {}^{sa}+1
$$

$$
\frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} +)!} \cdot
$$

$$
\frac{(n_{ik} - 1)!}{(j^{sa} - j_{ik})! \cdot (n_{ik} - j_{ik} - n_{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(- 1)!}{(n_{sa} - j^{sa} - \boldsymbol{n} + 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$_{fz}S_{j_{ik}\ldots a} = \left(\sum_{\boldsymbol{l}=}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}+j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(j_{ik}+j^{sa}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+j_{sa}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} + 1)} \sum_{\left(j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D\right.}^{\left.\right)} \sum_{j_{sa} = j_{ik} + \left.\right) - j_{sa}^{ik}}$$

$$\sum_{\left.\right) = \boldsymbol{n} + \mathbb{k}}^{(n_i - j_s} \sum_{\left(n_i\right.}^{\left.\right)} \sum_{+ \mathbb{k} + j_{sa}^{ik} - j_{ik})}$$

$$\sum_{n_{ik} = n_{is} + j_s} \sum_{- j_{sa}^{ik} - \mathbb{k}_1 \left(\right.}^{\left.\right)} \sum_{= n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} \right. \left. 2 \cdot j_{sa}^{ik} - 2 \cdot j_{i} \right. \left. - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \left. \right) \left(\boldsymbol{n} + 2 \right. \left. {}^{sa} + 2 \cdot j \right. \left. - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left. \boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j \left. \right. s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \left. \right. \boldsymbol{l} \wedge \boldsymbol{l_s} \leq \left. \right. - \boldsymbol{n} \left. \right. 1 \wedge$

$2 \leq \boldsymbol{l} \left. \right. D + \boldsymbol{l_{ik}} + j_{sa} \left. \right. \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq \left. \right. {}^{sa} + j_{sa}^{ik} - \left. \right. a - 1 \wedge$

$j_{ik} \left. \right. s - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \left. \right. = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\left. \right. \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j^{ik}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\left. \frac{(\boldsymbol{l_s} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{\left(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}\right)}^{\left(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=j_{ik}+j_{sa}-j^{sa}+1}^{n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - j_{ik} - 1)!}{(\quad - 2)! \cdot (n_i - \quad - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - \quad - \mathbb{k}_2)!}{j_{ik} - \quad)! \cdot (n_{ik} - \quad - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\quad - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - \quad - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\left.\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\right) -$$

$$\sum_{k=\boldsymbol{l}} \sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)}^{\left(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\colon \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z\colon z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{n}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{i}^{}}^{(\quad)} \sum^{j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{s}^{}\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-\quad j_{ik}-s-2\cdot\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-}{\left(\boldsymbol{l_s}+j_{sa}^{}-j_{ik}-\right.\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l}}{(D+j^{sa}+s-\boldsymbol{n}-\quad j_{sa})!\cdot\quad+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+\quad -s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \leq D+j^{sa}-\boldsymbol{n} \wedge \boldsymbol{l_{sa}} \leq D+s-\boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I \quad k > 0 \wedge$

$j_{sa} \leq \quad -1 \wedge j_{sa}^{ik} < \quad -1 \wedge j_{sa} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{} \cdots, \mathbb{k}_2, j_{s} \cdots, j_{sa}^{i}\} \wedge$

$s \geq \quad = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \quad = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} -} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}})!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=} \sum_{=j_{sa}^{ik}+1)} \sum_{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{sa}^{ik})}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{k=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i \cdot 2 \cdot j^{sa} + \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot (\cdot 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\left((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq \ ^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

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$j_{sa}^{ik} \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \le D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}-\mathbb{k}_1+\mathbb{k}(n_{ik}=\boldsymbol{n}-\mathbb{k}_2-j_{ik}+1)}^{n} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}$$

$$\frac{(\boldsymbol{l}_{\quad}-\boldsymbol{l}-j_{sa})}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+\quad\cdot(j_{ik}-j_{sa}^{ik}\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}\quad\quad-j_{sa})}{(j_{ik}+\boldsymbol{\quad sa}-j^{sa}-\boldsymbol{l_{ik}}\quad\cdot(j^{sa}\quad\quad-j_{sa})!}\cdot$$

$$\frac{(\quad+j_{sa}-\quad-s)!}{+j^{sa}-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}\quad_a-j^{sa}-s)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\ \sum_{(j_{ik}\quad+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \le D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1) \vee$

$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l} \ne \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \le D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \le D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\quad -s-1)} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_s}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i-n_{ik}-1)}{(j_{ik}-2)!\cdot(n_i$$

$$\frac{(n_{ik}-n_{sa}-$$

$$\frac{(}{(n_{sa}+j$$

$$\frac{(\boldsymbol{l_{ik}}-$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\colon \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z\colon z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$S_{j_{ik},j^{sa}} = \sum_{(j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}-1)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_{sa}}+j_{sa}-1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-1)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik}{}^{sa}} = \sum_{k=\boldsymbol{l}}^{\boldsymbol{n}+j_{sa}^{ik}-D-1)} \sum_{(j_{ik}=\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s} \sum_{(n_i-j_{ik}-\mathbb{k}_1+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_i=\boldsymbol{n}+\mathbb{k}\,(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{sa}=\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-1)!}{(\boldsymbol{l_{ik}}-j_{ik}-1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-1)!}{(j_{ik}+j_{sa}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j\ \mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{{}^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\ \ -2\cdot j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot(\ \ -1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\ \ )!\cdot(\boldsymbol{n}\ \ -j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}\ \ \ \ \wedge\boldsymbol{l_i}\ \ \ \ -s>\ \ \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_{sa}}\ \ s-\boldsymbol{n}-j_{sa}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq\ \ -1\wedge j_{sa}^{ik}\ \ \ \ -1\wedge j_{sa}^{s}=\ \ \ \ \wedge$

$\boldsymbol{s}\ \ \left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\ \ \mathbb{k}_2,j_{sa},\ \ j_{sa}^{i}\right\}\wedge$

$s\geq\ \ \wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$_{\boldsymbol{z}}:z=\ \ \mathbb{k}=\mathbb{k}_1+\mathbb{k}\ \ \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{\boldsymbol{k}=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum_{j^{sa}=j_{sa}+1}^{n}\ \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{(n_{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D}$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{(n_{sa}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + 2 \cdot j^{s} \quad 2 \cdot j_{sa}^{ik} \quad j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i \quad - I)! \cdot \left(\boldsymbol{n} + \quad \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{\quad + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} \quad \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \quad \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j \quad j_{sa}^{ik} \wedge$

$j_{ik} \quad j_{sa} \quad j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \quad = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=}^{n_{ik}+j_{ik}-j^{sa}-} {}_{-j^{sa}+1}
$$

$$
\frac{(n_i \quad -1)!}{(j_{ik}-2)!\,(n_i-n_{ik}\quad +1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2+1)!}{(j^{sa}-j_{ik}-1)!\,(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}\quad}{+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}\quad -j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}\quad +1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(D+j^{sa}-\boldsymbol{l_{sa}}-s)!}{(D\quad {}^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\quad -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}
$$

$$
\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}
$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{n}+j_{sa}-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{n}+j_{sa}-s}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\ \ -2\cdot j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot(\ \ -1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\ \ )!\cdot(\boldsymbol{n}\ \ -j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}\ \ \ \ \wedge\boldsymbol{l_i}\ \ \ \ -s>\ \ \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_s}\ \ -\boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq\ \ -1\wedge j_{sa}^{ik}\ \ -1\wedge j_{sa}^{s}=\ \ \wedge$

$\boldsymbol{s}\ \ \left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\ \ \mathbb{k}_2,j_{sa},\ \ j_{sa}^{i}\right\}\wedge$

$s\geq\ \ \wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$_{\boldsymbol{z}}: z=\ \ \mathbb{k}=\mathbb{k}_1+\mathbb{k}\ \ \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{\boldsymbol{k}=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right)} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - {}^{a} - s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} + 1)} \sum_{(j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D \; \ldots)} \sum_{j^{sa} = j_{ik} + j_{sa} - \; \ldots}$$

$$\sum_{\; \ldots \; + \mathbb{k}} \left(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik}\right)$$

$$\sum_{\; \ldots = n_{is} + j_{sa}^{s} - j_{sa}^{ik} + \mathbb{k}_1} \; \sum^{(\;\;)}_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{\left(n_i + 2 \cdot j^{\ldots} - 2 \cdot j_{sa}^{\ldots} \ldots_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i \; \ldots \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + \ldots \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{\ldots + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big($

$(D \geq \boldsymbol{l} \ldots < n \wedge \boldsymbol{l} \neq \; _{\boldsymbol{i}}\boldsymbol{l} \ldots \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq \ldots_{ik} \leq j^{\ldots} \ldots^{ik} \ldots j_{sa} \wedge$

$j_{ik} + j_{sa} \ldots^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} \ldots = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \; _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+\boldsymbol{l_{ik}}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2 \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(\quad a} - \mathbb{k}_2 - 1)!}{(j^{sa} - \quad - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (\quad + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} -)!}{(D + j^{sa} - \boldsymbol{n} - \quad)! \cdot (\quad + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=\quad + j_{sa}^{ik} - j_{sa}}^{\boldsymbol{l_{ik}} + j_{sa} - j_{sa}^{ik} + 1} \sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i + \quad j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \quad)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$(\quad > \quad < n \wedge \boldsymbol{l} \neq \quad_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

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$\boldsymbol{l_i} \le D + s - \boldsymbol{n}) \vee$

$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l} \ne \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \le D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \le D + s - \boldsymbol{n})) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j^{\dots}_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{}}^{(\ )} {}^{j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\right.}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}\right.\cdot j_{ik}-s-2}.$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-)!}{\left(\boldsymbol{l_s}+j_{sa}\right.\cdot j_{ik})!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-}{(D+j^{sa}+s-\boldsymbol{n}-}$$

$$\left((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge\right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{}-s \wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$$

$$D+s-\boldsymbol{n}-\boldsymbol{l_s} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1)\vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l}\neq \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$$

$$\left.D+j_{sa}-\boldsymbol{l}<\boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\right) \wedge$$

$$D-\boldsymbol{n}<n \wedge I=\mathbb{k}>0 \wedge$$

$$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}<j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$$

$$\boldsymbol{s}\colon\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\} \wedge$$

$$s \geq 5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(\boldsymbol{l_{sa}} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{(\ \ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=\right.}^{(n_i}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{(\ \ )} \sum_{-n_{ik}}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa} - 2 \cdot j_{ik} - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\ \ - \boldsymbol{l} - 1)!}{(\ \ + j_{sa}^{ik} - \ \ - \boldsymbol{l})! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + \ \ - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l}$ $\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D -$ $+ 1 \wedge$

$j_{sa} \leq j_{ik} \leq j$ $+ j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} \geq j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \ \ \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < \ \ \wedge \boldsymbol{l} \neq \ \ \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D}\sum_{j^{sa}=j_{ik}+j_{sa}-j_s}$$

$$\sum_{n_i+\mathbb{k}\,(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{-j_s+1)}$$

$$\sum_{n_{is}+j_{sa}^{s}-j_{sa}^{ik}\,\mathbb{k}_1\,(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}-2\cdot j_{sa}^{ik}-j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$$

$$-j^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$$

$$\boldsymbol{l_i} \leq D+s-\boldsymbol{n}) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_{sa}} \le D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \le D + s - \boldsymbol{n})) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{s}^{} \quad \boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{} \sum_{}^{}{}_{}^{}{}_{a}+1$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=}^{(n_i-j_{ik}-}{}_{2}-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\quad - j^{sa})!}$$

$$\frac{(\boldsymbol{l_{\quad}} - \boldsymbol{l} - j_{sa})}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + \quad)! \cdot (j_{ik} - j_{sa}^{ik} \quad)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} \quad \boldsymbol{l_{\quad}} - j_{sa})}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} \quad - j_{sa})!} \cdot$$

$$\frac{(\quad + j_{sa} - \quad - s)!}{(\quad + j^{sa} - \boldsymbol{n} - \quad)! \cdot (\boldsymbol{n} \quad_a - j^{sa} - s)!} -$$

$$\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(\quad)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(\quad - \mathbb{k}_2 - 1)!}{(j^{sa} - \quad - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=j_{sa}+2}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\left. \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \right.
$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right)} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - \quad - j_{sa}\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}}}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \quad + j_{sa} - j \quad s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} + 1)} \sum_{(j_{ik} \quad +1)}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1} \quad j_{sa}^{ik}+2$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} \quad _2 - j_{ik} + 1)}^{(n_i - j_{ik} - 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{n_i - n_{ik} - 1)!}{)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j \quad - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{\boldsymbol{l_s} + j_{sa} - \boldsymbol{l}} \sum_{j^{sa} = j_{sa} + 1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\ \ -2\cdot j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot(\ \ -1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\ \ -j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}\ \ \ \ \wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge\ \ =j_{sa}^{ik}-1$

$\boldsymbol{s}\colon\left\{j_{sa}^{s}\ \ _1,j_{sa}^{ik},\cdots,\mathbb{k}_2\ \ _{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=s\ \ \mathbb{k}\wedge$

$\mathbb{k}_z\ \ =2\wedge\mathbb{k}=\mathbb{k}_1\ \ \mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\left.\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\right)\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)\cdot$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{s}}-\boldsymbol{l}+1}\sum_{j^{sa}=j_{ik}+j_{s}-j_{sa}^{ik}+1}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}+1)}\sum_{j^{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_2}$$

$$\frac{(n_i-$$

$$(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j^{sa}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=j_{sa}^{ik}+1)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

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$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}$$

$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{s}$

$\boldsymbol{l_{sa}}-j_{sa}+1>\boldsymbol{l_s}\wedge$

$\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge\boldsymbol{l_i}\leq D+$ $\boldsymbol{n})\Big)\wedge$

$D\geq$ $<n\wedge I=$ $0\wedge$

$j_{s}^{i}\leq j_{sa}^{i}-1$ $_{a}^{ik}<j_{sa}$ $1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}$: {$\mathbb{k}_1, j_{sa}^{ik},\cdots,\mathbb{k}_{\_}{}_{sa},\cdots,j_{s}$

$\geq 5\wedge$ $=s+\mathbb{k}\wedge$

$\mathbb{k}_z: z=2\wedge\mathbb{k}$ $\mathbb{k}$ $_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right)} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - \quad - j_{sa}\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} -}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \quad + j_{sa} - j^{sa} \quad)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{\quad - j_{sa}^{ik}+1)} \quad \sum_{\quad - j_{sa}^{ik}}$$

$$\sum_{\quad = \boldsymbol{n} + \mathbb{k}}^{n} \quad \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{\quad = n_{is} + j_{sa}^{s} - j_{sa}^{ik} - \mathbb{k}_1} \quad \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i + \quad \cdot j^{sa} + \quad \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \quad + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \quad \boldsymbol{n} \quad \wedge \boldsymbol{l} \neq \quad _{\boldsymbol{i}} \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D \quad \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{s} - j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\left. \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \right.
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\quad)}\sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}+j_{ik}+1)}^{(\quad)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-\quad-1)!}{(j_{ik}-\quad)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-\quad-1)!\cdot\quad+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-\quad^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l}$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+$ $-\boldsymbol{n}-j_{sa}^{ik}$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge$ $=j_{sa}^{ik}-1$

$\boldsymbol{s}:\{j_{s}^{s}$ $\mathbb{k}_1,j_{sa}^{ik},\cdots,$ $j_{sa},\cdots,j_{sa}^{i}\}\wedge$

s $5\wedge\boldsymbol{s}=$ $\mathbb{k}\wedge$

$\mathbb{k}_z$ $=2\wedge\mathbb{k}=\mathbb{k}_1$ $\mathbb{k}_2\Rightarrow$

$$_{fz}S_{\,j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\left.\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot\right)$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=\boldsymbol{n}-D}^{}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{sa}^{ik}-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right)}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\right.-j_{sa})!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\quad+j_{sa}-j^{sa}\quad)!}\Bigg)-$$

$$\sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}\right.}^{(\quad+j_{sa}^{ik}-\boldsymbol{l})}\sum_{-D-s)\,j^{}}^{}{}_{a}-j_{sa}^{ik}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i+\quad j^{sa}+\quad\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\quad+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\quad\boldsymbol{n}\quad\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq\quad a+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}^{ik}-\boldsymbol{n}<\boldsymbol{l_{ik}}\leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2) \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j_{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{=\boldsymbol{l}}^{} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})\ j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ \ )} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-\cdot j_{ik}-s-\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-)!}{\left(\boldsymbol{l_s}+j_{sa}-j_{ik}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-)!}{(D+j^{sa}+s-\boldsymbol{n}-\ -j_{sa})!\ +j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+\ -s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l}\ j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq \ +\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}\ \wedge$

$D \geq \boldsymbol{n} < n \wedge I\ \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < \ -1 \wedge j_{sa} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik} \cdots, \mathbb{k}_2, j_{s}\ \cdots, j_{sa}^{i}\} \wedge$

$s \geq \ \ s = s+\mathbb{k}\ \wedge$

$\mathbb{k}_z: z = 2 \wedge\ = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)\ j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}})!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(\boldsymbol{l_{ik}} + \boldsymbol{n} - \mathbb{k})}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i - j_s + 1)} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik})}$$

$$\sum_{k=n_{is} + j_{sa}^{s} - j_{sa}^{ik} - \mathbb{k}_1}^{(\ )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{\left(n_i \cdot 2 \cdot j^{sa} + j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I) \cdot (\boldsymbol{n} \cdot 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D > \quad n \wedge \boldsymbol{l} \neq \quad \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq \quad + j_{sa}^{ik} - j_{sa} \wedge$

$\quad - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+} \sum_{j^{sa}=\boldsymbol{l_i}+}^{} \sum_{j_{sa}-D-s}^{}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{(n_i-j_{ik}-\mathbb{k}_1+)} \sum_{+1)}^{n_{ik}+j_{ik}} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\ \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-\ )}^{\boldsymbol{l_s}+\ -\boldsymbol{l}}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-}$$

$$\sum_{}^{-j_s+1)}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}}$$

$$\sum_{n_{is}+j_{sa}^{s}-j_{sa}^{ik}\ \mathbb{k}_1}^{(\ )}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}-2\cdot j_{sa}^{ik}-j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\ -I)!\cdot\left(\boldsymbol{n}+\ \cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<\ \wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\ \leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{\ \ ik}\ \ j_{sa}\wedge$

$j_{ik}+j_{sa}\ \ ^{ik}_{a}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}\ \ >\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(j_{ik} + j^{sa} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{}\sum_{=j_{ik}+}^{}-j_{sa}^{ik}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+}\sum_{(n_{is}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{}$$

$$\sum_{n_{ik}=n_{is}+j_s}^{}\sum_{-j_{sa}^{ik}-\mathbb{k}_1}^{}(\quad-n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)$$

$$\frac{\left(n_i+2\cdot j^{sa}\right.\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\quad(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}-s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\quad_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\quad D-\quad+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-\quad_{a}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\quad+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$$

$$\boldsymbol{l_i}\leq D+s\quad\boldsymbol{n})\vee$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\quad_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$$

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$\boldsymbol{l_{ik}} \leq D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n})) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{sa}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}+j_{ik}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{j^{sa}=j_{sa}+1}^{j_{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} + \mathbb{k}_2 - 1)!}{(0 - j_{ik} -)! \cdot (n_{sa} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=j_{sa}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j_{ik}, j^{sa} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1} \sum_{j^{sa} = j_{sa} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j^{ik}_{sa}-j_{sa})}^{(\ \ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+j^{ik}_{sa}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j^{s}_{sa}-j^{ik}_{sa}-\mathbb{k}} \sum_{n_{sa}=n_{ik}+j_{ik}-}^{(\ \ )}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j^{ik}_{sa} - 2 \cdot j_{ik} - s - j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot (n + 2 \cdot j^{sa} + j_{sa} - 2 \cdot j_{ik} - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa} - j_{ik} - \right) \cdot \left(j_{ik} - j^{ik}_{sa} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \ \leq D - \boldsymbol{n} + 1 \wedge$

$j^{ik}_{sa} \leq j_{ik} \leq j^{sa} + j^{ik}_{sa} - j_{sa} \wedge$

$j_{ik} + \ - j^{ik}_{sa} \leq j^{\ } \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j^{ik}_{sa} + 1 > \ \wedge \boldsymbol{l_{sa}} + \ ^{ik} - j_{sa} \ \boldsymbol{l_{ik}} \wedge$

$D + \ ^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq \ + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1\big) \vee$

$(D \geq \boldsymbol{n} < \ \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \ \leq D - \boldsymbol{n} + 1 \wedge$

$j^{ik}_{sa} \leq \ \leq j^{sa} \ j_{sa} \wedge$

$j_{ik} + j_{sa} - \ ^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\ - j^{ik} \ 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j^{ik}_{sa} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j^{i}_{sa} - 1 \wedge j^{ik}_{sa} < j_{sa} - 1 \wedge j^{s}_{sa} = j^{ik}_{sa} - 1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{=\boldsymbol{n}}^{n_{ik}+} \sum_{-j^{sa}-\mathbb{k}_2}
$$

$$
\sum_{=\boldsymbol{n}+j_{sa}+1}
$$

$$
\frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 2)!} \cdot
$$

$$
\frac{(n_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} - j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(j_{sa}^{ik} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_{sa}}+s-\boldsymbol{n}-j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1) \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s}=\cdots+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\cdots+\mathbb{k}_2=$

$$fzS_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{n}\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=j_{sa}^{ik}}\sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{(}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-\quad-1)!}{(j_{ik}-\quad)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-1)!\cdot(\quad_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum^{(\ )}_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)!\cdot\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)!\cdot\left(j_{ik} - j_{sa}^{ik} - 1\right.}\cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})!\cdot(\quad + j_{sa} - \quad^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \quad^{ik} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s \quad\quad) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \quad D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + \quad - j_{sa}^{ik} \leq j^{\quad} < \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \quad \wedge \boldsymbol{l_{sa}} + \quad^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + \quad - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq \quad + \boldsymbol{l_s} + \quad - \boldsymbol{n} - 1)\Big) \wedge$

$\quad \geq \boldsymbol{n} < \quad \wedge I = \mathbb{k} > (\quad \wedge$

$j_{sa} \leq \quad - 1 \wedge \quad \quad sa - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, \quad \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$> 5 \wedge \quad s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \quad \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{\boldsymbol{l}=\boldsymbol{l_s}+j_{sa}^{ik}}^{(\boldsymbol{l_s}+j_{sa}^{ik})} \sum_{j_{ik}=\boldsymbol{l_{sa}}-\boldsymbol{l}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - \right)!}{(n_i - \boldsymbol{n} - I)!\cdot\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - \cdot j_{ik} - s - \right)!}\cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} -)!}{\left(\boldsymbol{l_s} + j_{sa} - j_{ik}\right)!\cdot\left(j_{ik} - j_{sa}^{ik} - 1\right)!}\cdot$$

$$\frac{(D -)!}{(D + j^{sa} + s - \boldsymbol{n} - - j_{sa})!\cdot(+ j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} \leq \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - + 1 \wedge$

$j_{sa}^{ik} \leq j_{} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{} \leq j^{sa} \leq + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$< \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

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$$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{\supset} j^{\ \ sa} = \sum_{k=\boldsymbol{l}}^{\ } \left(j_{ik}= \right.^{\ } \sum_{\boldsymbol{+n}-D)}^{\ } \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{sa+j_{sa}^{ik}-j_{s}{}^{}{}_{k}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n} \left(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1\right) \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{j_{ik}-\mathbb{k}_1+1)\quad n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(\quad - 1)!}{(n_{\quad} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{s}} \cdot$$

$$\frac{(\boldsymbol{l_{ik}}}{(\quad - j_{ik} - \quad + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + \quad - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \quad - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{s} - \boldsymbol{l_{sa}} - s)!}{(D - j^{sa} - \quad)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I)!}{(n_i - \boldsymbol{n} - I)! \cdot (\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

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$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}$ $_{sa} - s \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} +$ $- \boldsymbol{n} - 1)$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq$ $\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n}$ $1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j$ $+ j_{sa}^{ik} -$ $\wedge$

j_{ik} $j_{sa} - j_{sa}^{ik} \leq j$ $\leq \boldsymbol{n} + j_{sa}$ $\wedge$

$\boldsymbol{l_{ik}} - j_{sa}$ $1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}$ $j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n}$ $< \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

D $\boldsymbol{n} <$ $\wedge I = \mathbb{k} > 0 \wedge$

j_{sa} $\leq j_{sa}^{i}$ $\wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+j_{sa}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\left(n_{is}=\right.}^{(n_i+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}-2\cdot j_{ik}-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+\right.j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\left.\right)!}\cdot$$

$$\frac{(\boldsymbol{l}-\boldsymbol{l}-1)!}{\left(+j_{sa}^{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\ldots\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\ldots1\wedge$

$j_{sa}\leq j_{ik}\leq j^{\ldots}+j_{sa}^{ik}-j_{\ldots}\wedge$

$j_{ik}\ldots j_{sa}-j_{sa}^{ik}\leq j^{\ldots}\leq\boldsymbol{n}+j_{sa}\ldots\wedge$

$\boldsymbol{l}_{\boldsymbol{ik}}-j_{sa}^{ik}\ldots1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}\ldots j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}^{ik}-\boldsymbol{n}<\ldots<\ldots+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1\big)\vee$

$(D\geq\boldsymbol{n}<\ldots\wedge\boldsymbol{l}\neq\ \boldsymbol{_i l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$\ldots^{ik}\leq j_{i\ldots}\ldots^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$

$D+j_{sa}^{ik}-\boldsymbol{n}<\boldsymbol{l_{ik}}\leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1\wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_{sa}}+s-\boldsymbol{n}-j_{sa})\vee$

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$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j_{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\ldots-2\cdot j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot(j_{ik}-\ldots-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\ldots)!\cdot(\boldsymbol{n}\ldots_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}\ldots\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge\ldots=j_{sa}^{ik}-1$

$\boldsymbol{s}\colon\left\{j_{sa}^{s}\ldots_1,j_{sa}^{ik},\cdots,\mathbb{k}_2\ldots_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=s\ldots\mathbb{k}\wedge$

$\mathbb{k}_z\ldots=2\wedge\mathbb{k}=\mathbb{k}_1\ldots\mathbb{k}_2\Rightarrow$

$${}_{fz}S_{j_{ik},j^{sa}}=\left(\sum_{k=\ {}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_{ik}=j_{sa}^{ik})}\ \sum_{j^{sa}=j_{sa}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\left.\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\right)\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{sa}}-\ _{i}\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{n_{ik}+\ \ -j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i\ \ _{ik}-1)!}{(\ \ 2)!\cdot(n_i-\ \ _{ik}-j_{ik}+1)!}$$

$$\frac{(n_{ik}-\ \ -\mathbb{k}_2\ \ !}{\ \ ^{a}-j_{ik}-\ \ !\cdot(n_{ik}+\ \ -n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}-j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(\boldsymbol{l_{sa}}+j_{sa}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot(j^{sa}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\boldsymbol{n}\right)!}{(n_i-\boldsymbol{n}-\boldsymbol{n})!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \leq D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\ldots}^{(\ldots)} \sum_{\ldots=j_{sa}}^{\boldsymbol{l_{sa}} - {}_{i}\boldsymbol{l}+\ldots}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\ldots-j_{ik}+1)}^{(n_i-j_{ik}-\ldots+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{\ldots n_i - n_{ik} - 1)!}{\ldots)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{\ldots} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - {}_{i}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{i}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\ldots}^{(\ldots)} \sum_{(j_{ik}=j_{sa}^{ik})}^{(\ldots)} \sum_{j^{sa}=j_{sa}}^{\ldots}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ldots)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{\ldots}
$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \boldsymbol{n}\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n})! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\sum_{j_{ik}, j^{sa}} \sum_{k = {}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{\left(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}\right)} \sum_{j^{sa} = j_{sa}}^{\boldsymbol{l_{sa}} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{\left(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1\right)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} -$$

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$$\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\boldsymbol{n}\right)!}{(n_i-\boldsymbol{n}-\boldsymbol{n})!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\ -2\cdot j_{sa}\right)}\cdot$$

$$\frac{(D-\boldsymbol{l_i}}{(D+s-\boldsymbol{n}\ )!\ \boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l}_{\boldsymbol{k}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\ j_{sa}=j_{sa}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots\right\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{z}S_{j_{ik},j^{sa}}=\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{ik}}+j_{sa}-\ _{i}\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - {}_{i}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{i}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} -$$

$$\sum_{k={}_{i}\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{s}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_{1}+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \boldsymbol{n}\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n})! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!}$$

$$\frac{(\quad)}{(D \quad - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} \quad _{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \quad > 0 \wedge$

$j_{sa}^{i} \leq j_{sa}^{i} - \quad j_{sa}^{ik} < j_{s} \quad - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \quad j_{sa}, \cdots, \quad\}$

$s \geq 5 \wedge \quad = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \quad \mathbb{k}_1 + \quad \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k={}_{i}\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik})}^{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-{}_{i}\boldsymbol{l}-j_{sa}+1\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-{}_{i}\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right.}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}-s)!}$$

$$\sum_{k=}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}(}^{n}\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-\cdot j_{sa}-\boldsymbol{n}\right)!}{(n_i-\boldsymbol{n}-\boldsymbol{n})!\cdot\left(\boldsymbol{n}-2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}={}_{i}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{sa}^{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq n+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}-j_{sa}+j_{sa}^{ik}-s=\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}-\wedge I=\mathbb{k}>\wedge$

$j_{sa}\leq j_{sa}^{i}-1\leq j_{sa}^{ik}<n_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s\geq 5\wedge\boldsymbol{s}\leq s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$fzS_{j_{ik},j^{sa}}=\sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}+1\right)}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}$$

$$\frac{\left(\boldsymbol{l_{ik}}-\quad_{\boldsymbol{i}}\boldsymbol{l}-j_{sa}^{\quad}\right)}{\left(\boldsymbol{l_{ik}}-j_{ik}-\quad_{\boldsymbol{i}}\boldsymbol{l}+\quad\right)!\cdot\left(j_{ik}-j_{sa}^{ik}\quad\right)!}\cdot$$

$$\frac{j_{sa}-\boldsymbol{l}_{\boldsymbol{s}}-s)!}{(D+\quad-\boldsymbol{n}\quad)!\quad-s)!}\quad-$$

$$\sum_{k=\quad_{\boldsymbol{i}}\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\quad\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i\quad 2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\boldsymbol{n}\right)!}{(n_i-\boldsymbol{n}-\boldsymbol{n})!\left(\boldsymbol{n}\quad 2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n}\quad n \wedge \boldsymbol{l} = \quad_{\boldsymbol{i}}\boldsymbol{l} \wedge \quad \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq \quad + j_{sa}^{ik} - \quad a \wedge$

$j_{i\quad} - j_{sa}\quad j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \quad > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \quad + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\ {}_{\boldsymbol{i}}\boldsymbol{l}}^{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\ {}_{\boldsymbol{i}}\boldsymbol{l}-j_{sa}+1\right)} \sum_{\left(j_{ik}=j_{sa}^{ik}\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-{}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1\right)}^{\left(n_i-j_{ik}-\mathbb{k}_1+1\right)} \sum_{n_{sa}=}^{n_{ik}+j_{ik}-j^{sa}-}
$$

$$
\frac{(n_i - \quad 1)!}{(j_{ik}-2)!\cdot(n_i - n_{ik} - \quad + 1)!}\cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 \quad 1)!}{(j^{sa} - j_{ik} - 1)! \quad - n_{sa} - j^{sa} - \mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)}{(\quad + j^{sa} \quad n-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\quad - \ {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik})!}{ \quad _k - j_{ik} - \quad +1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{\quad + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}-s)!} -
$$

$$
\sum_{k=\ {}_{\boldsymbol{i}}\boldsymbol{l}} \sum_{\left(j_{ik}=j_{sa}^{ik}\right)}^{(\ )} \sum_{j^{sa}=j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1\right)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \boldsymbol{n}\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n})!\cdot\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}
$$

$$
\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge
$$

$$
j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge
$$

$$
j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge
$$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z \sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{sa}} - {}_{\boldsymbol{i}}\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\boldsymbol{n}\right)!}{(n_i-\boldsymbol{n}-\boldsymbol{n})!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\quad-2\cdot j_{sa}\right)}\cdot$$

$$\frac{(D-\boldsymbol{l_i}}{(D+s-\boldsymbol{n}\quad)!\ \boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}\quad s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l}_{\boldsymbol{ik}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\quad j_{sa}=j_{sa}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots\right\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=s+\quad\wedge$

$\mathbb{k}_z:z\quad 2\wedge\quad=\mathbb{k}_1+\quad\Rightarrow$

$$\quad j_{ik},j^{sa}=\left(\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{ik}}+j_{sa}-\ _{\boldsymbol{i}}\boldsymbol{l}-j_{sa}^{ik}+1}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\left.\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\right)\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - {}_{i}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{i}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!}\Bigg) +$$

$$\Bigg(\sum_{k={}_{i}\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)\,\boldsymbol{l_{ik}}+j_{sa}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - \quad - 1)!}{(\quad)! \cdot (n_i - \quad - j_{ik} + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} \quad 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\quad - {}_{i}\boldsymbol{l} - j_{sa}^{ik})!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{i}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(\quad + j^{sa} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k={}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-{}_{i}\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-{}_{i}\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)\cdot$$

$$\sum_{k=}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}-j_{ik}-\mathbb{k}_1}\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+2\cdot j_{sa}^{ik}-2\cdot j_{sa}^{ik}-s-j_{sa}-\boldsymbol{n}\right)!}{(n_i-\boldsymbol{n}-\boldsymbol{n})!\cdot\left(\boldsymbol{n}-2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}={}_{i}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D-j_{sa}-\boldsymbol{n}\wedge$

$j_{sa}^{ik}\leq j_{sa}\leq j^{sa}+j_{sa}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}-1\leq j^{sa}-\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\ldots+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$\geq\boldsymbol{n}<\ldots\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge\ldots j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,\ldots^{ik}\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$>5\wedge\ldots s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{\,j_{ik},j^{sa}}=\left(\sum_{k=\,{}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}+1\right)}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik}\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}} - {}_{\boldsymbol{i}}\boldsymbol{l}+1}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

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$$\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\boldsymbol{n}\right)!}{(n_i-\boldsymbol{n}-\boldsymbol{n})!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\quad-2\cdot j_{sa}\right)}\cdot$$

$$\frac{(D-\boldsymbol{l_i}}{(D+s-\boldsymbol{n}\quad)!\quad\boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-\quad>\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-\quad\wedge j_{sa}^{s}=j_{sa}^{ik}-$

$\boldsymbol{s}\colon\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots\ \mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}$

$s\geq 5\wedge\boldsymbol{s}=\quad+\mathbb{k}\wedge$

$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\quad+\mathbb{k}_2$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}-s)!}\ -$$

$$\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}\ \sum_{(j_{ik}=j_{sa}^{ik})}^{(\ \ )}\ \sum_{j^{sa}=j_{}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ \ )}\ \sum_{n_{sa}}\ \sum_{j_{ik}^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\boldsymbol{n}\right)!}{(n_i-\boldsymbol{n}-\boldsymbol{n})!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{}{(D-s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} =\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D+j_{sa}-\boldsymbol{n} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} =\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D+s-\boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} =\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D+s-\boldsymbol{n})\Big) \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}_{\boldsymbol{i}}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik}}{j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot (j^{sa} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}_{\boldsymbol{i}}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \boldsymbol{n}\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n})! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}
$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

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$2 \le \boldsymbol{l} \le D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}) \vee$

$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \le \boldsymbol{l} \le D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}})) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ge 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$j^{\{j_{ik}, j^{sa}\}} \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\left. \frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot \right.$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\ \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(j_{ik}+j^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{n}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik}+1} \sum_{\boldsymbol{l}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}\left(n_{is}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1 (n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} - 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \quad)! \cdot (\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j \quad + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 2 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \quad = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}\big) \vee$

$(D \quad < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 2 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}\big)\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_{sa}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+1}^{j_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum^{(\ )}_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)!\cdot\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)!\cdot\left(j_{ik} - j_{sa}^{ik} - \boldsymbol{l}\right)!}\cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})!\cdot(\quad + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l_{sa}} - j_{sa}^{ik} +$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}})\big) \wedge$

$D \geq \quad < n \wedge I = \mathbb{k}_1 = 0 \wedge$

$j_{sa}^{s} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa}^{s} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa} - \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} \geq s + \mathbb{k} \wedge$

$z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\left(\sum_{k=\boldsymbol{l}}^{+\boldsymbol{n}+j_{sa}^{ik}-j_{sa}-1)}\ \sum_{(j_{ik}=\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}\right.$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-\ -\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(\quad - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})} \cdot$$

$$\frac{(\boldsymbol{l_{ik}}}{(\quad - j_{ik} - \quad + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + \quad - \boldsymbol{l_{ik}} - \quad)!}{(j_{ik} + \quad - j^{sa} - \boldsymbol{l_{ik}}) \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} \quad - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} \quad) \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(\quad)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-k)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{k+j_{sa}-\boldsymbol{l}} \sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \right.
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \right.
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-D-1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-1)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-1)!}{(j_{ik}+\boldsymbol{n}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 2 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} - j_{sa}^{ik} - \boldsymbol{l})} \sum_{(j_{ik} = \boldsymbol{n} + j_{sa}^{ik} - D - 1)}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1} \sum_{j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D}^{n} \sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{i}^{}}^{(\quad)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\right.}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-\right.j_{ik}-s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\right.(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l}}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}-j_{sa})!\cdot(+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{sa}-j_{sa}-1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{ik}}+j_{sa}^{ik}-j_{sa}>$

$D \geq \boldsymbol{n} < n \wedge l-\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}^{i}-1 \wedge j_{sa} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, j_{sa}^{ik}, \cdots, \mathbb{k}_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq z = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - D - j_{sa})} \sum_{(j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - 1)}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + \boldsymbol{n} - D}^{}\right.$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa})}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}^{}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l}_{\boldsymbol{s}}-\boldsymbol{l}-j_{sa})!}{(\boldsymbol{l}_{\boldsymbol{ik}}-j_{ik}-\boldsymbol{l}+\quad)!\cdot(j_{ik}-j_{sa}^{ik}\quad)!}\cdot$$

$$\frac{(\boldsymbol{l}_{\boldsymbol{sa}}\quad\boldsymbol{l}_{\boldsymbol{s}}-j_{sa})!}{(j_{ik}+\boldsymbol{\quad}_{\boldsymbol{sa}}-j^{sa}-\boldsymbol{l}_{\boldsymbol{ik}}\quad)!\cdot(j^{sa}\quad-j_{sa})!}\cdot$$

$$\frac{(D\quad j_{sa}-\boldsymbol{l}_{\boldsymbol{s}}\quad-s)!}{(\quad+j^{sa}-\boldsymbol{n}-\boldsymbol{l}_{\boldsymbol{s}}\quad)!\cdot(\boldsymbol{n}+\quad-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l}_{\boldsymbol{s}}+j_{sa}-\boldsymbol{l})}\ \sum_{(j_{ik}-\boldsymbol{l}_{\boldsymbol{i}}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l}_{\boldsymbol{s}}-\boldsymbol{l}-1)!}{(\boldsymbol{l}_{\boldsymbol{s}}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l}_{\boldsymbol{i}})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}_{\boldsymbol{i}}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}_{\boldsymbol{s}}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(\quad)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(\quad)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{(\quad)}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(\quad)} \sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

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$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1\geq\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2=$

$$j_{\ldots,j^{sa}}=\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\ \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{}}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-)!}{\left(\boldsymbol{l_s}+j_{sa}-\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-)!}{(D+j^{sa}+s-\boldsymbol{n}-\quad-j_{sa})!\quad+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+$ $-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j$ $=\boldsymbol{l_{ik}} \wedge$

$D \geq$ $< n \wedge I=\mathbb{k}$ $0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge$ $< j_{sa}$ $1 \wedge j_{sa}^{s}$ $_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}$: $\{j_{s}$ $\cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots,$ $j_{sa}, \cdots j_{sa}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s}$ $s+\mathbb{k} \wedge$

$\mathbb{k}_z$: z $2 \wedge \mathbb{k}=$ $\mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} -} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}})!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{(j_{ik}=\boldsymbol{l_i}+} \sum_{-D-s)} \sum_{-j_{sa}^{ik}}^{\left(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}\right)}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{k=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i - \boldsymbol{n} \cdot j^{sa} + \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot (n - 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j \quad j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{=\boldsymbol{n}}^{n_{ik}+} \sum_{j^{sa}+1}^{-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} - \boldsymbol{n} - j^{sa} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{sa}} - \boldsymbol{l} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_{ik},j^{sa}} \sum_{\boldsymbol{l}=\boldsymbol{l_s}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-j_{sa}-D-1)}^{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s} \sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}^{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(\quad - 1)!}{(\quad + j^{sa} - \boldsymbol{n} \quad 1)! \cdot (\boldsymbol{n} - j^{sa} \quad)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \quad ^{ik}}{(\quad - j_{ik} - \quad 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + \quad ^{ik} - \boldsymbol{l_{ik}} - \quad)!}{(j_{ik} + \quad - j^{sa} - \boldsymbol{l_{ik}}) \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{s} - \boldsymbol{l_{sa}} - s)!}{(D \quad j^{sa} - \boldsymbol{n} \quad \boldsymbol{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j\ldots sa} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+\ldots-D} \sum_{(j_{ik}=\boldsymbol{n}+j_{sa}^{ik}-\ldots)}^{\boldsymbol{l_i}+\ldots-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_{\ldots}=\ldots+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}\ldots-j_{ik}+1)}^{(n_{\ldots}-\ldots-\mathbb{k}_1+1)\ldots} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{\ldots_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(\ldots_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}$$

$$\frac{(\boldsymbol{l_{\quad}}-\boldsymbol{l}-j_{sa})}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+\quad\cdot(j_{ik}-j_{sa}^{ik}\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}\quad\boldsymbol{l}_{\quad}-j_{sa})}{(j_{ik}+\boldsymbol{\quad_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\quad\cdot(j^{sa}\quad\quad-j_{sa})!}\cdot$$

$$\frac{(\quad+j_{sa}-\quad-s)!}{+j^{sa}-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}\quad_{a}-j^{sa}-s)!}-$$

$$\sum_{\boldsymbol{=l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}} \sum_{(j_{ik}-\quad\quad-D-j_{sa})}^{\quad} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$$

$$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots j_{sa}^{i}\} \wedge$

$s \ge 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j_{ik}, j^{sa} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j^{ik}_{sa}-j_{sa})}^{(\ \ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+j^{ik}_{sa}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j^{s}_{sa}-j^{ik}_{sa}-\mathbb{k}}^{(\ \ )} \sum_{n_{sa}=n_{ik}+j_{ik}-\ldots-\mathbb{k}_2)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j^{ik}_{sa} - 2 \cdot j_{ik} - s - \ldots j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\ldots + 2 \cdot j^{sa} + \ldots j_{sa} \ldots 2 \cdot j_{ik} \ldots - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\ldots - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{\ldots} - j_{ik} - \ldots\right)! \cdot \left(j_{ik} - j^{ik}_{sa} - 1\right)!} \cdot$$

$$\frac{(D - \ldots \boldsymbol{l_i})!}{(\ldots + j^{sa} + \ldots \boldsymbol{n} - \boldsymbol{l_i} - j \ldots)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \ldots + 1 \wedge$$

$$j^{ik}_{sa} + 1 \leq j_{ik} \leq j^{sa} + j^{ik}_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j^{ik}_{sa} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j^{ik}_{sa} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j^{ik}_{sa} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > \ldots - \boldsymbol{n} + \ldots$$

$$j^{ik}_{sa} + 1 \leq j_{ik} \leq j^{sa} + j_{\ldots} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j^{\ldots}_{sa} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j^{ik}_{sa} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j^{ik}_{sa} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$$

$$(D \geq \boldsymbol{n} < \ldots \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$$

$$j^{ik}_{sa} + 1 \leq j_{ik} \leq j^{sa} + j^{ik}_{sa} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j^{ik}_{sa} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j^{ik}_{sa} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j^{ik}_{sa} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}})\Big) \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{sa}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+\cdots)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_{ik}-\mathbb{k}_2-1)!}{(j_{ik}-2)!\cdot(n_i-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot
$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa} \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\sum_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{j^{sa} = \boldsymbol{l_{ik}} + \boldsymbol{n} + j_{sa} - D - j_{sa}^{ik}}^{\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{}\sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{(\ \ )}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\left(n_{is}=\right.}^{(n_i\ \ +1)}\left.-j_{ik}\right)$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{(\ \ )}\left.=n_{ik}\right.-j^{sa}-\mathbb{k}_2)$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}-2\cdot j_{ik}-s-2\cdot j_{sa}-1\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_{ik}}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}<j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\big)\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_{ik}}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\big)\big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}}^{n_{ik}+j_{ik}-j^{sa}-} \sum_{-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa}}{j_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j - \boldsymbol{l_{sa}} - s)!}{(D - j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}
$$

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$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j_{sa}^{ik} - j_{sa})} \; \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \; \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \; \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \; \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \; \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}\sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{s}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-\mathbb{k}_1-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}+j_{sa}-\boldsymbol{n}-1)!}{(n_{sa}+j_{sa}-\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-$ $\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$f_Z S_{j_{ik}} \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\big(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\big)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\big(j_{ik}-j_{sa}^{ik}-1\big)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_1-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{}^{n_{ik}+\boldsymbol{n}-j^{sa}-\mathbb{k}_2} \sum_{}^{\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - \mathbb{k}_2 - 1)!}{j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(j_{ik} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{\left(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}\right)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\big)\wedge$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - \quad - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(\quad - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} \quad \quad)!}{(\quad - j_{ik} - \quad + 1)! \cdot (j_{ik} - \quad - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + \quad - \boldsymbol{l_{ik}} \quad)!}{(j_{ik} + \quad - j^{sa} - \boldsymbol{l_{ik}}) \quad (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D \quad - j^{sa} - \quad \boldsymbol{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{}\sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{(\ \ )}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\left(n_{is}=\right.}^{(n_i+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}}^{(\ \ )}\sum_{=n_{ik}}$$

$$\frac{\left(n_i+\boldsymbol{n}+j^{sa}+2\cdot j_{sa}-2\cdot j_{ik}-s-2\cdot j_{sa}-1\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(j_{ik}+j_{sa}^{ik}-j_{sa}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+\boldsymbol{l_s}-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\left((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge\right.$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\vee$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\vee$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{\mathbb{g}}{}_{j^{sa}} = \sum_{k=\boldsymbol{l}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{(j_{ik}=\mathbb{k}+\boldsymbol{n}-D)}^{\mathbb{k}+\boldsymbol{n}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(\quad-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa}+}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}}{(\quad-j_{ik}-\quad+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\quad-j^{sa}-\boldsymbol{l_{ik}})!\,(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{s}\quad-\boldsymbol{l_{sa}}-s)!}{(D\quad-j^{sa}-\boldsymbol{l}\quad)!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\dots,j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(\dots j^{sa}+j_{sa}^{ik}\dots)} \dots \sum_{j^{sa}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}-D-1} \dots
$$

$$
\sum_{\dots+\mathbb{k}} \sum_{(n_{ik}=\boldsymbol{n}\dots-j_{ik}+1)} \dots \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1} \dots
$$

$$
\frac{\dots - n_{ik} - \mathbb{k}_1 - 1)!}{\dots j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(\dots_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ \ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j\ \cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l} - j_{sa} + 1)} \sum_{(j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = n_i - j_{ik})}^{(n_i - \boldsymbol{n} + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1}^{(\quad)} \sum_{(n_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa} - 2 \cdot j_{ik} - 2 \cdot j_{sa} - I)!}{(n_i - \boldsymbol{n} - I)! \cdot (\boldsymbol{n} + 2 \cdot j^{sa} + \quad j_{sa}^{ik} - 2 \quad - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{\quad - \boldsymbol{l} - 1)!}{(\quad + j_{sa}^{ik} - \quad - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + \quad - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} \quad D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \quad j^{sa} + j_{sa} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq \quad \leq \boldsymbol{n} + \quad \wedge$

$\boldsymbol{l_{ik}} - \quad + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} \quad - j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \quad = \mathbb{k} > \quad \wedge$

$j_{s} \quad j_{sa} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \quad j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq \quad \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{(\quad)} \sum_{j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s}^{\boldsymbol{l_i} + j_{sa} - \boldsymbol{l} - s + 1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-j_{sa})}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+\quad)!\cdot(j_{ik}-j_{sa}^{ik}\quad)!}\cdot$$

$$\frac{(D-\quad\boldsymbol{l_{sa}}-s}{(\quad j^{sa}-\boldsymbol{n}-\quad)!\cdot(\quad-\quad^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})\ j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ \ )}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i\quad\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\quad-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\quad n\wedge \boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le \boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-\mathbb{k}} \sum_{j^{sa}=j_{ik}+\mathbb{k}_2-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_i-j_{ik}+1)}^{\mathbb{k}_2-j_{ik}+1)} \sum_{n_{ik}+j_{ik}-\mathbb{k}_2}^{j^{sa}=\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i \quad n_{ik} - \mathbb{k}_2}{(j_{ik} \quad 2)! \cdot (n_i \quad n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} \quad _{sa} - \mathbb{k}_2 \quad 1)!}{(j^{sa} \quad _{ik} - 1)! \cdot (n_{ik} \quad j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa}-1)!}{(\quad j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}}) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa} \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 \cdots \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{\left(j_{ik} = \boldsymbol{l_s} + \boldsymbol{n} + j_{sa}^{ik} - D\right.}^{} \sum_{j^{sa} = \boldsymbol{l_s} + \cdots - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{\left(n_{ik} = \cdots - j_{ik} + 1\right)}^{(n_i - j_{ik} - \cdots + 1)} \sum_{n_{ik} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - \cdots + \mathbb{k}_2}$$

$$\frac{(n_i \cdots n_{ik} - \mathbb{k}_1 \cdots}{(j_{ik} \cdots 2)! \cdot (n_i \cdots n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - \cdots - \mathbb{k}_2 \cdots 1)!}{(j^{sa} - \cdots - 1)! \cdot (n_{ik} \cdots j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\cdots_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{\left(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}\right)}^{\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1} \sum_{j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{\left(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik}\right)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{s} - j_{sa}^{ik} - \mathbb{k}_1}^{(\ \ )} \sum_{\left(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2\right)}$$

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$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}$$

$$\left((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge\right.$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\vee$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\left.\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>0\right)\wedge$$

$$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$$

$$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{ik}<j_{sa}^{ik}-1$$

$$\boldsymbol{s}:\left\{j_s^s,\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}$$

$$\boldsymbol{s}\geq 6\wedge\boldsymbol{s}=\mathbb{k}\wedge$$

$$\mathbb{k}_z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$$

$${}_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)}\sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{(j_{ik}+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_i-j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}\ \ \wedge j_{sa}^{s}<j_{sa}^{ik}\ \ 1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}$

$\mathbb{k}\ \ z=2\wedge\mathbb{k}\ \ \mathbb{k}_1+\mathbb{k}\ \ \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}} \sum_{j^{sa}=\boldsymbol{l_s}+1}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{-j_{ik}+1)}^{(n_i-j_{ik}-1)} \sum_{=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_2}$$

$$\frac{(n_i \quad n_{ik} - \mathbb{k}_1}{(j_{ik} \quad 2)! \cdot (n_i \quad n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} \quad - \mathbb{k}_2 \quad 1)!}{(j^{sa} \quad - 1)! \cdot (n_{ik} \quad j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} \quad s)}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < \quad _{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 =$

$$S_{j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{(\ \ )} \sum_{j^{sa} = j_{sa}+1}^{\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1} \right.$$

$$\left. \sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \right)$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\Bigg(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=j_{sa}+2}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(j_{ik} + j^{sa} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + j_{sa}^{ik} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)}$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right.}^{\boldsymbol{l_{ik}}+j_{}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{j^{sa}=j_{}}^{}+1$$

$$\sum_{}^{(n_i-j_s+}\sum_{\boldsymbol{n}+\mathbb{k}\left(n_{is}\right.}^{}+\mathbb{k}+j_{sa}^{ik}-j_{ik})$$

$$\sum_{n_{ik}=n_{is}+j_{s}}^{}\sum_{}^{}{}_{a}^{ik}-\mathbb{k}_1\ (n_{}-n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)$$

$$\frac{\left(n_i+2\cdot j^{sa}\right.\cdot j_{sa}^{ik}-2\cdot j_{i}-s-2\cdot j_{sa}-I)!}{(n_i-)(\boldsymbol{n}+2\cdot^{sa}+2\cdot j_{}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_{}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \boldsymbol{l}\wedge\boldsymbol{l_s}\leq\ -\boldsymbol{n}-1\wedge$

$j_{sa}^{ik}\leq j_{}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{}+1\leq j_{}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{s}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$\boldsymbol{l_{sa}}\leq D+\ -\boldsymbol{n}\wedge$

$n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=j_{sa}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=j_{sa}+2} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot \right.
$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-\mathbb{k}_1-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=j_{sa}^{ik}+1)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{}\right.$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)!\cdot(n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}\cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)!\cdot(n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}$$

$$\frac{(\boldsymbol{l}_{\quad}-\boldsymbol{l}-j_{sa})}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+\quad!\cdot(j_{ik}-j_{sa}^{ik}\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}\quad\boldsymbol{l}_{\quad}-j_{sa})}{(j_{ik}+\boldsymbol{\quad_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\quad!\cdot(j^{sa}\quad-j_{sa})!}\cdot$$

$$\frac{(D\quad j_{sa}-\boldsymbol{l_s}\quad-s)!}{(\quad+j^{sa}-\boldsymbol{n}-\boldsymbol{l}_{\quad}!\cdot(\boldsymbol{n}+\quad-j^{sa}-s)!}\Bigg)-$$

$$\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\quad-\boldsymbol{l}+1)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$$

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$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_Z S_{j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \right.$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik} + 1}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1} \right.$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} -} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - \right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(+ j_{sa}^{ik} - j_{ik} - \right)!} \cdot$$

$$\frac{(D + \quad - \boldsymbol{l_{sa}} - }{(D + j^{sa} - \boldsymbol{n} - \quad + j_{sa} - \quad - s)!}\Bigg) -$$

$$\sum_{k=} \sum_{=j_{sa}^{ik}+1} \sum_{=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(\quad - \boldsymbol{l})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i + \quad j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \quad I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\boldsymbol{n} \quad \wedge \boldsymbol{l} \neq \quad _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$$

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$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{n_{ik}+\mathbb{k}\,(n_{ik}=n_{sa}+\mathbb{k}_2-j_{ik}+1)} \sum_{j^{sa}+1}^{n_{sa}+1}
$$

$$
\frac{(n_i - n_{i\cdots} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(\cdots - j_{ik} - 1)! \cdot (n_{i\cdots} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-\quad^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=\quad\mathbb{k}\wedge$

$\mathbb{k}_z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}\right)$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}}^{\quad -D}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-\quad-\mathbb{k}_2-1)!}{(j^{sa}-\quad-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right)}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\right.-j_{sa})!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\quad+j_{sa}-j^{sa}\quad)!}\Bigg)-$$

$$\sum_{k}\ \sum_{(j_{ik}=j^{sa}+\quad-j_{sa})\ j^{sa}\quad}^{\quad-j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum\quad\quad-D-s$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+\quad\cdot j^{sa}+\quad\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\quad+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\quad\boldsymbol{n}\quad\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_{ik}}+\quad-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+2\leq\boldsymbol{l}\leq\ \ _{\boldsymbol{i}}\boldsymbol{l}-1\wedge$

$j_{sa}^{ik}-j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik}\wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_{ik}+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)} \sum_{j^{sa}=\boldsymbol{n}-j^{sa}+1}^{}
$$

$$
\frac{(n_i - n_{ik}}{(j_{ik} \quad 2)! \cdot (n_i \quad n_{ik} - j_{ik} \quad \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} \quad _{sa} - \mathbb{k}_2 \quad 1)!}{(j^{sa} \quad _{ik} - 1)! \cdot (n_{ik} \quad j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j^{sa} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}
$$

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$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_i}$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-$ $-j_{sa}^{ik}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}\leq j_{sa}^{ik}-$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{\quad}\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=$ $+\mathbb{k}_2\Rightarrow$

$$S_{j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\ \ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{n}\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}\right.$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\boldsymbol{l} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{l=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D}$$

$$\sum_{n_i}\sum_{+\mathbb{k}\,(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{n_i}\sum_{m_{is}+j_{sa}^{s}-j_{s}^{ik}\,k_1\,(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}-2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\quad-I)!\cdot\left(\boldsymbol{n}+\quad\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\geq \boldsymbol{n}<\quad\wedge\boldsymbol{l}\neq\ {}_{i}\boldsymbol{l}\wedge\ \leq D-\boldsymbol{n}+1\wedge$$

$$D+\boldsymbol{l}\quad+j_{sa}-\quad-j_{sa}^{ik}+2\leq\boldsymbol{l}\leq\ {}_{i}\boldsymbol{l}-1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}-\quad+j_{sa}^{ik}-j_{sa}-1\wedge$$

$$+j_{sa}\quad+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$$

$$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik}\wedge$$

$$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$$

$$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+} \sum_{=\boldsymbol{n}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{-j^{sa}-\mathbb{k}_2}^{n_{ik}+} \sum_{}^{a}+1
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - 1)!}{(j^{sa} - j_{ik} + 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} - j^{sa} - \boldsymbol{n} + 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_s} - j_{sa}^{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\colon \left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z\colon z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2$

$$_{fz}S_{j_{ik}\ldots a}=\left(\sum_{\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}+j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(j_{ik}+j^{ik}_{sa}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+j^{ik}_{sa}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D\right.}^{\left.}\sum_{j_{sa}=j_{ik}+}^{-j_{sa}^{ik}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s}\sum_{\left(n_i\right.}^{+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{n_{ik}=n_{is}+j_s}\sum_{-j_{sa}^{ik}-\mathbb{k}_1}^{(}{}_{=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}\right.\cdot j_{sa}^{ik}-2\cdot j_{i}-s-2\cdot j_{sa}-I)!}{(n_i-\left(\boldsymbol{n}+2\right.^{sa}+2\cdot j_{}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{}-s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\boldsymbol{l}\wedge\boldsymbol{l_s}\leq\boldsymbol{n}-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\boldsymbol{l}=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j^{ik}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\left. \frac{(D + j^{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}\sum_{\left(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}\right)}^{\left(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}\right)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\left(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1\right)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{}^{n_{ik}+}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}$$

$$\frac{(n_{ik}-\mathbb{k}_2)!}{-j_{ik}-\cdot(n_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)-$$

$$\sum_{k=\boldsymbol{l}}\sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)}^{\left(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}\right)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{i}^{jsa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\right.}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-\right.j_{ik}-s-2}.$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\right.(j_{ik}-j_{sa}^{ik}-1)!}.$$

$$\frac{(D-\boldsymbol{l}_{}}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}_{}-j_{sa})!\cdot(+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{s}=\boldsymbol{l_{ik}}\wedge$

$\boldsymbol{l_{ik}}\leq D+j_{}^{}-\boldsymbol{n}\wedge\boldsymbol{l}_{}\leq D+s-\boldsymbol{n}\wedge$

$D\geq\boldsymbol{n}<n\wedge I-\mathbb{k}>0\wedge$

$j_{sa}\leq j_{}^{}-1\wedge j_{sa}^{ik}<j_{}-1\wedge j_{sa}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\{j_{sa}^{s},\cdots,j_{sa}^{ik},\cdots,\mathbb{k}_{}sa,\cdots,j_{sa}^{i}\}\wedge$

$s\geq z=s+\mathbb{k}\wedge$

$\mathbb{k}_z\colon z=2\wedge=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} -} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}}$$

$$\frac{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})!}{(\boldsymbol{n} + j_{sa} - j$$

$$\sum_{k=} \sum_{=j_{sa}^{ik}+1)} \sum_{(l_s + j_{sa}^{ik} - a - j_{sa}^{ik}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{k=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i \cdot 2 \cdot j^{sa} + \right) j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I)!}{(n_i - \boldsymbol{n} - I)! \cdot (n 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\left((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge \right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq a + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$\left. D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1\right) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

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$j_{sa}^{ik} \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \le D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}$$

$$\sum_{n_i=n_{ik}+\mathbb{k}_1}^{n} \sum_{(n_{ik}=\boldsymbol{n}-j^{sa}-\mathbb{k}_2+1)}^{(n_i-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\quad - j^{sa})!}$$

$$\frac{(\boldsymbol{l}_{\quad} - \boldsymbol{l} - j_{sa})}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + \quad)! \cdot (j_{ik} - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} \quad \boldsymbol{l}_{\quad} - j_{sa})}{(j_{ik} + \boldsymbol{\quad sa} - j^{sa} - \boldsymbol{l_{ik}} \quad)! \cdot (j^{sa} \quad - j_{sa})!} \cdot$$

$$\frac{(\quad + j_{sa} - \quad - s)!}{\quad + j^{sa} - \boldsymbol{n} - \quad)! \cdot (\boldsymbol{n} \quad a - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\quad -s-1)} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_s}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-\mathbb{k}_1-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\quad-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-\quad-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(\quad-1)!}{(n_{sa}+j\quad-\boldsymbol{n}-1)!\cdot\quad-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\quad-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}\quad+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}\quad\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\quad-j^{\quad}\quad)!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+\quad-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\colon \left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z\colon z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$S_{j_{ik},j^{sa}} \sum_{j_{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - 1)!}{(j_{ik} + \boldsymbol{l} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I)!}{(n_i - \boldsymbol{n} - I)! \cdot (\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

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$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$
{}_{fz}S_{j_{ik}{}^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\cdots+1)} \sum_{j=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s} \sum_{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}-1)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_{sa}}-1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

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$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$$

$$\boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+1}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j \quad \mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{{}^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\quad-2\cdot j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot(\quad-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}\quad-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}$ $\quad \wedge \boldsymbol{l_i}$ $\quad -s > \quad \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_{sa}}$ $\quad s-\boldsymbol{n}-j_{sa} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq$ $\quad -1 \wedge j_{sa}^{ik}$ $\quad -1 \wedge j_{sa}^{s} <$ $\quad \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j$ $\quad \cdots, \mathbb{k}_2, j$ $\quad \cdots, j_{sa}^{i}\}$

$s \geq$ $\quad \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$_{\boldsymbol{z}}: z=$ $\quad \mathbb{k}=\mathbb{k}_1+\mathbb{k}$ $\quad \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{(\ =\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D}$$

$$\sum_{(\ -j_s+1)}$$

$$\sum_{+\mathbb{k}\,(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}\ \mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{s}\ \ 2\cdot j_{sa}^{ik}\ \ j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i\ \ -I)!\cdot\left(\boldsymbol{n}+\ \cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{\ +j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}\ \ \wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\ \ \leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j\ \ j_{sa}^{ik}\wedge$

$j_{ik}+j_{sa}\ \ j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\ =\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=}^{n_{ik}+j_{ik}-j^{sa}-} {}_{-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa}}{{}_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j^{sa} - \boldsymbol{l_{sa}} - s)!}{(D - j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}
$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\ \ -2\cdot j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot(\ \ -1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\ \ )!\cdot(\boldsymbol{n}\ \ -j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}\ \ \ \ \wedge \boldsymbol{l_i}\ \ \ \ -s>\ \ \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}\ \ -\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq\ \ -1 \wedge j_{sa}^{ik}\ \ \ \ -1 \wedge j_{sa}^{s}<\ \ \ \ \wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{\ \ }\cdots,\mathbb{k}_2,j_{\ \ }\cdots,j_{sa}^{i}\}$

$s \geq\ \ \wedge \boldsymbol{s}=s+\mathbb{k}\ \ \wedge$

$_{\boldsymbol{z}}: z=\ \ \mathbb{k}=\mathbb{k}_1+\mathbb{k}\ \ \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{\boldsymbol{k}=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right)}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-{}^{a}-s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-\right)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-}$$

$$\sum_{}^{(-j_s+1)}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}$$

$$\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-1}^{(\ \ )}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{-}-2\cdot j_{sa}^{-}-tk-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big(\big(D\geq \boldsymbol{l}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq \boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\big)\vee$$

$$\big(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+\boldsymbol{l_{ik}}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (\boldsymbol{n} - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{sa} - j^{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} -} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - \right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (\quad + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} -)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=\boldsymbol{l}}^{\quad} \sum_{(j_{ik}-\quad+j_{sa}^{ik}-j_{sa}}^{\boldsymbol{l_{ik}}+j_{sa}-} \sum_{j^{sa}=j_{sa}+1}^{j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i + \quad j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \quad)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$(\quad > \quad n \wedge \boldsymbol{l} \neq \quad \boldsymbol{_i l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

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$\boldsymbol{l_i} \le D + s - \boldsymbol{n}) \vee$

$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l} \ne \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \le D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \le D + s - \boldsymbol{n})\big) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ge 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j^{\dots}_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \ \sum_{(j^{\dots}-j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{n} \ \sum_{=\boldsymbol{n}+\mathbb{k}}^{j_{ik}-\mathbb{k}_1+1)} \ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\right.}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}\right.\cdot j_{ik}-s-2}.$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-)!}{(\boldsymbol{l_s}+j_{sa}-j_{ik})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}.$$

$$\frac{(D-}{(D+j^{sa}+s-\boldsymbol{n}-}$$

$$\left((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge\right.$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{}^{}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$D+s-\boldsymbol{n}<\boldsymbol{l_{ik}}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1)\wedge$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$$

$$\left.D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1\right)\wedge$$

$$D-\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$$

$$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$$

$$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$$

$$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\boldsymbol{l_{sa}} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{}\sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{(\ \ )}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\left(n_{is}=\right.}^{(n_i}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}}^{(\ \ )}\sum_{}^{}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}-2\cdot j_{ik}-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+\ldots+j_{sa}^{ik}-2\ldots_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{\ldots-\boldsymbol{l}-1)!}{\ldots+j_{sa}^{ik}-\ldots-\boldsymbol{l})!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+\ldots-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\ldots\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\ldots+1\wedge$

$j\ldots\leq j_{ik}\leq j\ldots+j_{sa}^{ik}-j\ldots\wedge$

$j_{ik}\ldots j_{sa}-j_{sa}^{ik}\leq j\ldots\leq\boldsymbol{n}+j_{s}\ldots\wedge$

$\boldsymbol{l}\ldots-j_{sa}^{ik}\ldots1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}\ldots j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+s-\boldsymbol{n}<\ldots<D\ldots\boldsymbol{s}+s-\boldsymbol{n}-1)\vee$

$(D\geq\boldsymbol{n}<\ldots\wedge\boldsymbol{l}\neq\ \ _i\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\ldots{}^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\Big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D}\sum_{j^{sa}=j_{ik}+j_{sa}-j_s}$$

$$\sum_{n_i+\mathbb{k}\,(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(\quad-j_s+1)}$$

$$\sum_{n_{is}+j_{sa}^{s}-j_{sa}^{ik}\,\mathbb{k}_1\,(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i+2\cdot j^{sa}-2\cdot j_{sa}^{ik}-j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$(D\geq\boldsymbol{n}\quad n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\ \boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq\quad\leq j^{sa}\quad\quad j_{sa}\wedge$$

$$j_{ik}+j_{sa}-\quad^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$-j^{ik}\quad 1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$$

$$\boldsymbol{l_i}\leq D+s-\boldsymbol{n})\vee$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n})) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{s}^{} \quad l_{ik}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{} \sum_{j^{sa}=}^{} {}_{a}+1$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=}^{(n_i-j_{ik}-} {}_{2}-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - \quad l_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} \quad \quad l_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}$$

$$\frac{(\boldsymbol{l}_{\quad}-\boldsymbol{l}-j_{sa})}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+\quad\cdot(j_{ik}-j_{sa}^{ik}\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}\quad\quad-j_{sa})}{(j_{ik}+\boldsymbol{\quad sa}-j^{sa}-\boldsymbol{l_{ik}}\quad\cdot(j^{sa}\quad\quad-j_{sa})!}\cdot$$

$$\frac{(\quad+j_{sa}-\quad-s)!}{+j^{sa}-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}\quad_a-j^{sa}-s)!}-$$

$$\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)}\ \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(\quad} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(\quad=\boldsymbol{n}+\mathbb{k}_2-\quad+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_{\quad} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (\quad - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(\quad - \mathbb{k}_2 - 1)!}{(j^{sa} - \quad - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=j_{sa}+2}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\left. \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \right.
$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\quad-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\quad+j_{sa}-j\quad s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}\quad+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\quad j_{sa}^{ik}+2$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}\quad_2-j_{ik}+1)}^{(n_i-j_{ik}-\quad+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i\quad n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}\quad(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j\quad-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{j^{sa}=j_{sa}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\quad-2\cdot j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot(j_{ik}\quad-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\quad j_{sa})!\cdot(\boldsymbol{n}\quad j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik}$ $\quad \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge$ $< j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \quad, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s \quad \mathbb{k} \wedge$

$\mathbb{k}_z \quad = 2 \wedge \mathbb{k} = \mathbb{k}_1 \quad \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\left.\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot\right.$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)\cdot$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}-\boldsymbol{l}+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}+1)}\sum_{n_{ik}+j_{ik}-\mathbb{k}_2}^{n_{ik}+j_{ik}-\mathbb{k}_2}\sum_{j^{sa}=\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_{ik}-n_{ik}}{(j_{ik}-2)!\cdot(n_{ik}-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j^{sa}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=j_{sa}^{ik}+1)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} \quad)!} \cdot$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{s}$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D +$ $\boldsymbol{n})\Big) \wedge$

$D \geq$ $< n \wedge I =$ $0 \wedge$

$j_{sa}^{s} \leq j_{sa}^{i} - 1$ $_{sa}^{ik} < j_{sa}$ $1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{$ $, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots \mathbb{k}_2, j_{sa}, \cdots \} \wedge$

$\geq 6 \wedge$ $= s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k}$ $\mathbb{k}$ $_2 \Rightarrow$

$$_{fz}S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right)}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\quad-j_{sa}\right)!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\quad+j_{sa}-j^{sa}-)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\ \sum_{\quad-j_{sa}^{ik}+1)}^{\quad}\ \frac{}{\quad-j_{sa}^{ik}}$$

$$\sum_{\quad=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+\cdot j^{sa}+\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\quad+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\ldots\boldsymbol{n}\ldots\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D\ldots\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$

$j_{sa}^{s}-j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik}\wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-} \sum_{j^{sa}=\boldsymbol{l_{sa}}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\left. \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \right.
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\quad)}\sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+}^{-\boldsymbol{l}+}$$

$$\sum_{n_i=\boldsymbol{n}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}}^{(\quad+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(\quad-n_{ik}-\quad-1)!}{(j_{ik}-2)!\cdot(\quad-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{\quad}-\mathbb{k}_2-1)!}{(j^{sa}-\quad_{ik}-1)!\cdot\quad_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-\quad^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}}$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_{ik}}+$ $-\boldsymbol{n}-j_{sa}^{ik}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge$ $< j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{s}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \quad \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\}$

$s \geq 6 \wedge \boldsymbol{s} = \quad \mathbb{k} \wedge$

$\mathbb{k}_z \quad = 2 \wedge \mathbb{k} = \mathbb{k}_1 \quad \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\left.\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\right)\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l}+\boldsymbol{n}-D}^{}\right.$$

$$\left.\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\right.$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-\mathbb{k}_2-1)!}{(j^{sa}-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right)} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - \right. - j_{sa})!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\quad + j_{sa} - j^{sa} \quad)!}\Bigg) -$$

$$\sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}\right.}^{(\quad} \sum_{\quad}^{(\quad)} \quad \cdot j^{\quad} \cdot \quad ^{\quad - j_{sa}^{ik}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i - j_s + 1)}$$

$$\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i + \quad j^{sa} + \quad \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \quad + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \quad \boldsymbol{n} \quad \wedge \boldsymbol{l} \neq \quad _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq \quad a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}-\mathbb{k}_1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2) \cdot (n_i - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})\ j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ \ )} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-\cdot j_{ik}-s-\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-)!}{\left(\boldsymbol{l_s}+j_{sa}-j_{ik}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-}{(D+j^{sa}+s-\boldsymbol{n}-\ -j_{sa})!\ +j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+\ -s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{}^{}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l}-j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq\ +\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}\wedge$

$D\geq\boldsymbol{n}<n\wedge I\ \mathbb{k}>0\wedge$

$j_{sa}\leq j_{}^{}-1\wedge j_{sa}^{ik}<\ -1\wedge j_{sa}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\ j_{sa}^{ik},\cdots,\mathbb{k}_{}j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s\geq\ s=s+$

$\mathbb{k}_z:z=2\wedge\ =\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)\ j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} -$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}})!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(j_{ik} + \boldsymbol{n} - \boldsymbol{l_{ik}})}^{} \sum_{} j_{sa} - j_{sa}^{ik}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i - j_s + 1)} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik})}$$

$$\sum_{k = n_{is} + j_{sa}^{s} - j_{sa}^{ik} - \mathbb{k}_1}^{(\ )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{\left(n_i \cdot 2 \cdot j^{sa} + j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I) \cdot (n \cdot 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D > \quad n \wedge \boldsymbol{l} \neq \quad \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq \quad + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} \quad - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+} \sum_{j^{sa}=\boldsymbol{l_i}+}^{} {}_{sa}-D-s
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{(n_i-j_{ik}-\mathbb{k}_1+)} \sum_{n_{sa}=\boldsymbol{n}-j}^{n_{ik}+j_{ik}} {}^{sa}-\mathbb{k}_2
$$

$$
\frac{-n_{ik}-\mathbb{k}-1)!}{(j_{ik}-2)!\cdot(n_i}\cdot
$$

$$
\frac{-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(\boldsymbol{a}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-\boldsymbol{l_{sa}})}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-\boldsymbol{l}}^{\boldsymbol{l_s}+}$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{-j_s+1)}$$

$$\sum_{n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}-2\cdot j_{sa}^{ik}-j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{} \quad {}^{ik} \quad j_{sa} \wedge$

$j_{ik}+j_{sa} \quad {}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik} \quad > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\} \wedge$

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$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(j_{ik} + j^{sa} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_i} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + \boldsymbol{l_i} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa}}$$

$$\sum_{= \boldsymbol{n} + \mathbb{k}}^{(n_i - j_s}$$

$$\sum_{n_{ik} = n_{is} + j_s}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} \cdot 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \quad)! \cdot (\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j \quad s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \quad \boldsymbol{l} \wedge \boldsymbol{l_s} \quad D - \quad + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s \quad \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \quad \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

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$\boldsymbol{l_{ik}} \le D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \le D + s - \boldsymbol{n}\big)\big) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ge 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}+1)}^{(n_i-j_s+1)} \sum_{n_{is}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{n_{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j_{ik}, j^{sa} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1} \sum_{j^{sa} = j_{sa} + 1}^{n} \sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ \ )}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}}^{(\ \ )}\sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}+\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-\boldsymbol{n}-j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(n_{ik}+2\cdot j^{sa}+\boldsymbol{n}+j_{sa}-2\cdot j_{ik}-s-\boldsymbol{n}-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{n}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+\boldsymbol{l_i})!}{(D+j^{sa}+\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\ \leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+\ -j_{sa}^{ik}\leq j^{\ }<\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\ \wedge\boldsymbol{l_{sa}}+\ -j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D+\ -\boldsymbol{n}<\boldsymbol{l_{ik}}\leq\ +\boldsymbol{l_s}+\ -\boldsymbol{n}-1)\vee$

$(D\geq\boldsymbol{n}<\ \wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\ \leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq\ \leq j^{sa}+\ -j_{sa}\wedge$

$j_{ik}+j_{sa}-\ \leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$-j^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+} \sum_{=\boldsymbol{n}+} \sum_{+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} - \boldsymbol{n} - j^{sa} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_s} - \boldsymbol{l} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - I\right)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big($

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_{sa}}+s-\boldsymbol{n}-j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_i} \wedge \boldsymbol{l_i}+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1) \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = \cdots + \mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k} = \cdots + \mathbb{k}_2 =$

$$fzS_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=j_{sa}^{ik}}\sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{(}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(\quad-n_{ik}-\quad-1)!}{(j_{ik}-2)!\cdot(\quad-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-1)!\cdot(\quad+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum^{(\ )}_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-\quad^{sa}-s)!}$$

$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\quad^{ik}\wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_{sa}}+s\quad\quad)\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\quad D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+\quad-j_{sa}^{ik}\leq j^{\quad}<\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\quad\wedge\boldsymbol{l_{sa}}+\quad^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+\quad-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq\quad+\boldsymbol{l_s}+\quad-\boldsymbol{n}-1)\big)\wedge$

$\geq\boldsymbol{n}<\quad\wedge I=\mathbb{k}>(\quad$

$j_{sa}\leq j_{\quad}-1\wedge\quad_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\quad,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$>6\wedge\quad s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{\boldsymbol{l}=1}^{(\boldsymbol{l_s}+j_{sa}^{ik})} \sum_{(j_{ik}=\boldsymbol{l_{sa}}-\boldsymbol{l}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-\cdot j_{ik}-s-\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-)!}{\left(\boldsymbol{l_s}+j_{sa}-j_{ik}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-)!}{(D+j^{sa}+s-\boldsymbol{n}-j_{sa})!\cdot(+j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _i\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \leq \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _i\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{sa}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D+\boldsymbol{l}<\boldsymbol{l_i} \leq D+\boldsymbol{l_{sa}}+s-\boldsymbol{n}-j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _i\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

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$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{\cdot}j^{\cdot}{}_{sa} = \sum_{k=\boldsymbol{l}}^{\ \ +j_{sa}^{ik}-j_{sa}} \sum_{(j_{ik}=\ \ +\boldsymbol{n}-D)}^{\ \ _k+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(-1)!}{(+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{s}}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}}{(-j_{ik}-+1)!\cdot(j_{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+-\boldsymbol{l_{ik}}-)!}{(j_{ik}+-j^{sa}-\boldsymbol{l_{ik}})!\,(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{s}-\boldsymbol{l_{sa}}-s)!}{(D-j^{sa}-\boldsymbol{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I)!}{(n_i-\boldsymbol{n}-I)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

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$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}$ $_{sa} - s \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} +$ $- \boldsymbol{n} - 1)$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq$ $\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n}$ $1 \wedge$

j $\leq j_{ik} \leq j$ $+ j_{sa}^{ik} -$ $\wedge$

j_{ik} $j_{sa} - j_{sa}^{ik} \leq j$ $\leq \boldsymbol{n} + j_s$ $\wedge$

$\boldsymbol{l_{ik}} - j_{sa}$ $1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}$ $j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n}$ $< \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

D $\boldsymbol{n} <$ $\wedge I = \mathbb{k} > 0 \wedge$

j_{sa} $\leq j_{sa}^{i}$ $\wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{n}-j^{sa}-\boldsymbol{l_{ik}})!\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{\left(j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s\right)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_{is} = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{\left(n_{is} = \right.}^{(n_i + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1}^{(\ )} \sum_{\left(n_{ik} \right.} - j^{sa} - \mathbb{k}_2)$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa} - 2 \cdot j_{ik} \right. - 2 \cdot j_{sa} - I)!}{(n_i - \boldsymbol{n} - I)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + \right. j_{sa}^{ik} - 2 \cdot \left. j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{\left. - \boldsymbol{l} - 1\right)!}{\left(+ j_{sa}^{ik} - \right. - \boldsymbol{l})! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + \ - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \ \ \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \ \ + 1 \wedge$

$j_{sa} \leq j_{ik} \leq j^{ \ } + j_{sa}^{ik} - j_{ \ } \wedge$

$j_{ik} \ \ j_{sa} - j_{sa}^{ik} \leq j^{ \ } \leq \boldsymbol{n} + j_{sa} \ \ \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} \ \ j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa}^{ik} - \boldsymbol{n} < \ \ < \ \ + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1\big) \vee$

$(D \geq \boldsymbol{n} < \ \ \wedge \boldsymbol{l} \neq \ \ \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$\ \ ^{ik} \leq j_{i \ } \ \ ^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$

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$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$_{fz}S_{j_{ik},j} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})\ j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j \quad \mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{{}^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-I\right)!}{(n_i-\boldsymbol{n}-I)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\quad-2\cdot j_{sa}\right)}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot(j_{ik}-\quad-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}\quad-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \quad_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} \quad \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge \quad < j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s} \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots \quad, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s \quad \mathbb{k} \wedge$

$\mathbb{k}_z \cdot \quad = 2 \wedge \mathbb{k} = \mathbb{k}_1 \quad \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\left.\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\right)\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j_{sa}^{ik})}^{\boldsymbol{l_{sa}}-\ _{i}\boldsymbol{l}+1}\sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-\quad\cdot(n_i-n_{ik}-\mathbb{k}_1+1)!}$$

$$\frac{(n_{ik}-\quad-\mathbb{k}_2}{a}-j_{ik}-\quad\cdot(n_{ik}+\quad-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}-j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(\boldsymbol{l_{sa}}+j_{sa}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{s}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}\ \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\boldsymbol{n}\right)!}{(n_i-\boldsymbol{n}-\boldsymbol{n})!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \leq D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\ _{i}\boldsymbol{l}}^{(\ )} \sum_{j_{ik}=j^{sa}+j_{sa}-\boldsymbol{l_{sa}}-\ _{i}\boldsymbol{l}+k}^{\boldsymbol{l_{sa}}-\ _{i}\boldsymbol{l}+k} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - \ldots - n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{\ldots} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \ _{i}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \ _{i}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \boldsymbol{n}\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n})! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\sum_{j_{ik}, j^{sa}} \sum_{k = {}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{\left(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}\right)} \sum_{j^{sa} = j_{sa}}^{\boldsymbol{l_{sa}} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{\left(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1\right)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} -$$

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$$\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \boldsymbol{n}\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n})! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - \quad - 2 \cdot j_{sa}\right)} \cdot$$

$$\frac{(D - \boldsymbol{l}_{\boldsymbol{i}}}{(D + s - \boldsymbol{n} \quad)! \quad \boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l}_{\boldsymbol{s}} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{\quad}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \quad j_{sa} < j_{\quad} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa} \quad , j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z \quad 2 \wedge \mathbb{k} = \mathbb{k}_1 \quad \mathbb{k}_2 \Rightarrow$

$$_{j_z}S_{j_{ik},j^{sa}} = \sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\ _{\boldsymbol{i}}\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{(\boldsymbol{l_{ik}} - {}_{i}\boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - {}_{i}\boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} -$$

$$\sum_{k={}_{i}\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{s}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \boldsymbol{n})!}{(n_i - \boldsymbol{n} - \boldsymbol{n})! \cdot (\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(}{(D - s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} \quad _{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \quad > 0 \wedge$

$j_{sa}^{i} \leq j_{sa}^{i} - \quad j_{sa}^{ik} < j_{s} - 1 \wedge j_{sa}^{s} < j_{sa}^{i} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \quad \mathbb{k}_2, j_{sa}, \quad j \wedge$

$s \geq 6 \wedge \quad = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \quad \mathbb{k}_1 + \quad \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k={}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-{}_{i}\boldsymbol{l}-j_{sa}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - {}_{i}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{i}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right.} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!}$$

$$\sum_{k=} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \boldsymbol{n}\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n})! \cdot \left(\boldsymbol{n} - 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{sa}^{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} - j_{sa} + j_{sa}^{ik} - s = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} \wedge I = \mathbb{k} > \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}, \cdots, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} \leq s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik}, j^{sa}} = \sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}} - {}_{i}\boldsymbol{l}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}$$

$$\frac{\left(\boldsymbol{l_{ik}}\quad_{\boldsymbol{i}}\boldsymbol{l}-j_{sa}^{\quad}\right)}{\left(\boldsymbol{l_{ik}}-j_{ik}-\ _{\boldsymbol{i}}\boldsymbol{l}+\quad\right)\cdot\left(j_{ik}-j_{sa}^{ik}\quad\right)!}\cdot$$

$$\frac{j_{sa}-\boldsymbol{l}_{\boldsymbol{s}}\quad-s)!}{(D+\quad-\boldsymbol{n}\quad)!\quad-s)!}\ -$$

$$\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\quad\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i\quad 2\cdot j^{sa}+2\quad j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\boldsymbol{n}\right)!}{(n_i-\boldsymbol{n}-\boldsymbol{n})\quad\left(\boldsymbol{n}\quad 2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}\quad n\wedge\boldsymbol{l}=\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\quad\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq\quad+j_{sa}^{ik}-\quad a\wedge$

$j_{ik}\quad j_{sa}\quad j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\quad>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$

$\boldsymbol{l_{ik}}\quad+j_{sa}^{ik}-\boldsymbol{n}\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\ {}_{i}\boldsymbol{l}-j_{sa}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=}^{n_{ik}+j_{ik}-j^{sa}-}
$$

$$
\frac{(n_i - n_{ik} - \quad 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \quad + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 \quad 1)!}{(j^{sa} - j_{ik} - 1)! \cdot \quad - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa}-1)}{(\quad + j^{sa} \quad n-1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\quad - \ {}_{i}\boldsymbol{l} - j_{sa}^{ik})!}{\quad_{ik} - j_{ik} - \quad + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{\quad + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} -
$$

$$
\sum_{k=\ {}_{i}\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik})}^{(\ )} \sum_{j^{sa}=j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \boldsymbol{n}\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n})! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}
$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

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$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$$

$$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$$

$$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n})) \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z \sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{sa}} - {}_{\boldsymbol{i}}\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \boldsymbol{n}\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n})!\cdot\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - \quad - 2\cdot j_{sa}\right)}\cdot$$

$$\frac{(D - \boldsymbol{l_i}}{(D + s - \boldsymbol{n}\quad)!\ \boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} \quad s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l}_{\boldsymbol{k}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \quad j_{sa} < j_{\quad} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa} \quad , j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z \quad 2 \wedge \mathbb{k} = \mathbb{k}_1 \quad \mathbb{k}_2 \Rightarrow$

$$\quad j_{ik}, j^{sa} = \left(\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{ik}}+j_{sa}-\ _{\boldsymbol{i}}\boldsymbol{l}-j_{sa}^{ik}+1} \right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)!\cdot(n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}\cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)!\cdot(n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}\cdot$$

$$\left.\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)!\cdot(\boldsymbol{n} - j^{sa})!}\cdot\right.$$

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$$\frac{(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!}\Bigg) +$$

$$\Bigg(\sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik})}^{\boldsymbol{l_{ik}}+j_{sa}-{}_{\boldsymbol{i}}\boldsymbol{l}-j_{sa}^{ik}} \sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\boldsymbol{l_{sa}} + \boldsymbol{j^{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-{}_{\boldsymbol{i}}\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik})}^{\boldsymbol{l_{sa}}-{}_{\boldsymbol{i}}\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-{}_{\boldsymbol{i}}\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-{}_{i}\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)\cdot$$

$$\sum_{k=}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}-j_{ik}-\mathbb{k}_1}\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+2\cdot j_{sa}^{ik}-2\cdot j_{sa}^{ik}-s-j_{sa}-\boldsymbol{n}\right)!}{(n_i-\boldsymbol{n}-\boldsymbol{n})!\cdot\left(\boldsymbol{n}-2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D - j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{sa} \leq j^{sa} + j_{sa} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} - 1 \leq j^{sa} - \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{n} \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa} - 1 \wedge j_{sa} - j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$> 6 \wedge s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k={}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-{}_{\boldsymbol{i}}\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-{}_{\boldsymbol{i}}\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\left(\sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}}-{}_{\boldsymbol{i}}\boldsymbol{l}\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-{}_{\boldsymbol{i}}\boldsymbol{l}+1}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-{}_{\boldsymbol{i}}\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-{}_{\boldsymbol{i}}\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

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$$\sum_{k=\ {}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \boldsymbol{n}\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n})! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - \quad - 2 \cdot j_{sa}\right)} \cdot$$

$$\frac{(D - \boldsymbol{l_i}}{(D + s - \boldsymbol{n} \quad)! \quad \boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - \quad > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - \quad \wedge j_{sa}^{s} < j_{sa}^{ik} -$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik} \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = \quad + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \quad + \mathbb{k}_2$

$$ {}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\ {}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}-s)!}\;-$$

$$\sum_{k=\ \boldsymbol{i}\boldsymbol{l}}\ \sum_{(j_{ik}=j_{sa}^{ik})}^{(\ \ )}\ \sum_{j^{sa}=j_{}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ \ )}\ \sum_{j_{ik}^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\boldsymbol{n}\right)!}{(n_i-\boldsymbol{n}-\boldsymbol{n})!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{}{(D-s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n})\Big)\wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l_i}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i \quad n_{ik} - \mathbb{k}_1}{(j_{ik} \quad 2)! \cdot (n_i \quad n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} \quad _{sa} - \mathbb{k}_2 \quad 1)!}{(j^{sa} \quad _{sa} - 1)! \cdot (n_{ik} \quad j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(\quad j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot (j^{sa} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l_i}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \boldsymbol{n}\right)!}{(n_i - \boldsymbol{n} - \boldsymbol{n})! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}
$$

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$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}\big) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{i} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ \ )} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\left. \frac{\big(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\big)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \big(j_{ik} - j_{sa}^{ik} - 1\big)!} \cdot \right.
$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\Bigg(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(j_{ik} + j^{sa} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + j_{sa} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)}$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\ \sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik}+1}\ \sum_{\boldsymbol{l}+\boldsymbol{n}+j_{sa}-D-s}^{}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+}\ \sum_{\left(n_{is}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{}$$

$$\sum_{n_{ik}=n_{is}+j_{s}^{ik}-\mathbb{k}_1}^{}\ \sum_{\left(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)}^{}$$

$$\frac{\left(n_i+2\cdot j^{sa}+\ j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(\ -\boldsymbol{n}-\mathbb{k}_{\ }-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+\ j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\left(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge\right.$$

$$D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+2\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\left.\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\right)\vee$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+2\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$$

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$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}\big)\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{\quad} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{=\boldsymbol{n}+\mathbb{k}_2-} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2) \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(\quad - n_{sa} - 1)!}{(\quad - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\ +j_{sa}-j^{sa}-\ )!}$$

$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j^{ik}_{\ }+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j^{ik}_{\ }-j_{sa}>\boldsymbol{l_{ik}}\big)\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+\ \wedge$

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j^{ik}_{\ }+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j^{ik}_{\ }-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\ +j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\big)\big)\wedge$

$D\geq\boldsymbol{n}<n\wedge\ =\mathbb{k}>0\wedge$

$j_{s}\ j_{sa}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}\leq j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\mathbb{k}_1,\ ,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 1\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{\,j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{(j_{ik}=\boldsymbol{n}+j_{sa}^{ik}-j_{sa}-1)}^{(j_{ik}=\boldsymbol{n}+\boldsymbol{n}-D)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+\quad-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(\quad-1)!}{(n_{\quad}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{s}}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}}{(\quad-j_{ik}-\quad+1)!\cdot(j_{ik}-\quad-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+\quad-\boldsymbol{l_{ik}}-\quad)!}{(j_{ik}+\quad-j^{sa}-\boldsymbol{l_{ik}})!\,(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}\quad-\boldsymbol{sa}-s)!}{(D+j^{sa}-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{sa}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}\quad a+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{} \right.$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)+$$

$$\left(\sum_{k=\boldsymbol{l}}^{} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(\quad - 1)!}{(n_{\quad} + j^{sa} - \boldsymbol{n} \quad 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \quad)!}{(\boldsymbol{l_{\quad}} - j_{ik} - \quad 1)! \cdot (j_{ik} - j_{sa}^{\quad} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + \quad - \boldsymbol{l_{ik}} - \quad)!}{(j_{ik} + \quad - j^{sa} - \boldsymbol{l_{ik}}) \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} \quad \boldsymbol{l_{sa}} - s)!}{(D + \quad - \boldsymbol{n} - \quad)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+2 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$S_{j_{ik},j^{sa}} \sum_{(j_{ik}=\boldsymbol{l}+j_{sa}^{ik}-D-1)}^{(j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{i}^{}}^{(\quad)}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \mathbb{k}_{} - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 -)!}\cdot$$

$$\frac{1}{(\quad + 2\cdot j^{sa} + j_{sa}^{} - j_{ik} - 2\cdot j_{sa})!}\cdot$$

$$\frac{(\quad - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{} - j_{ik} - \cdot\left(j_{ik} - j_{sa}^{ik} - 1\right)!\right.}\cdot$$

$$\frac{(D -)!}{(\quad j^{sa} + s \quad \boldsymbol{n} - \boldsymbol{l_i} - j \quad)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} \quad 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l} \quad - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j \quad j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j \quad + j_{sa} - j_{sa} \quad 1 \leq j \quad \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} \quad j_{sa}^{ik} + 1 = \boldsymbol{l_s} \quad + j_{sa}^{ik} \quad > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} \quad \wedge I = \mathbb{k} >= \quad \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \quad ^{ik} - \quad - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}, \mathbb{k}_1 \quad ^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} \quad s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\left(\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-j_{sa}-1)} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{}\right.$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - 1)!}{(\boldsymbol{l_{ik}} - j_{ik} - 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - 1)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} + \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fz^{\cdot}j_{\cdot\cdot sa} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\boldsymbol{\cdot}\, j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{\left(\boldsymbol{l_s}+j_{ik}-j_{ik}-\boldsymbol{l}\right)!\,(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j^{sa}+s-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{s}-j_{sa}=\boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = [\ ] >= 0 \wedge$

$j_{sa}^{s} \leq j_{sa}-1 \wedge j_{sa}^{ik}=j_{ik}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \cdots, j_{sa}^{s}\}$

$s \geq 4 \wedge z = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}_z = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right)}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-{}^{sa}-s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{{}^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)$$

$$\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}}\sum_{\mathbb{k}_1}^{(\ )}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+2\cdot j^{sa}\cdot j_{sa}^{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \quad < n \wedge \boldsymbol{l_s} > \quad = \boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j \quad j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{\left(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}\right.}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{ik}+\left.-j^{sa}-\mathbb{k}_2\right.} \sum_{\left.=\boldsymbol{n}\right)^{j^{sa}+1}}
$$

$$
\frac{(n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_{ik}-j_{ik}+\quad)!}\cdot
$$

$$
\frac{(\quad-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-\quad-j^{sa})!}\cdot
$$

$$
\frac{(\quad-1)!}{(n_{sa}-j^{sa}-\boldsymbol{n}+1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\quad-\boldsymbol{l}-j_{sa}^{ik})!}{(\quad-j_{ik}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\left(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)}^{(\quad)}
$$

$$
\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot
$$

$$
\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot
$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fz^{\mathfrak{I}}{}_{j_{ik}}{}^{sa} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

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$$\sum_{k=\overline{\boldsymbol{l}}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{i}^{}}^{(\quad)} \sum_{}^{j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_{}-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\quad)!}\cdot$$

$$\frac{1}{(\quad+2\cdot j^{sa}+\quad j_{sa}^{}-\quad i_{ik}-\quad-2\cdot j_{sa})!}\cdot$$

$$\frac{(\quad-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{}-j_{ik}-\quad\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!\right.}\cdot$$

$$\frac{(D-\quad)!}{(\quad j^{sa}+s\quad\boldsymbol{n}-\boldsymbol{l_i}-j\quad)!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n}\quad 1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j\quad \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l}\quad-j_{sa}^{ik}+1\quad \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}\quad j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k}\quad = 0 \wedge$

$j_{sa} \leq j_{sa}\quad 1 \wedge j_{sa}^{ik} = j_{s}\quad -1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \quad j_{sa}, j_{sa}^{i}\} \wedge$

$s \quad 4 \wedge s\quad s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2\quad \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\overline{\boldsymbol{l}}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j_{ik}-\boldsymbol{s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\ )!}\cdot$$

$$\frac{1}{(\ +2\cdot j^{sa}+\ -j_{sa}^{ik}-\ -2\cdot j_{sa})!}\cdot$$

$$\frac{(\ -\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{\ }-j_{ik}-\ \cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!\right.}\cdot$$

$$\frac{(D-\ _i)!}{(\ +j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j\ )!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}\ -1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j\ \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l}\ -j_{sa}^{ik}+1\ \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}\ _{sa}^{ik}-j_{sa} \geqslant \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\ =0 \wedge$

$j_{sa}\ \leq j_{sa}\ -1 \wedge j_{sa}^{ik}=j_{s}\ -1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \ , j_{sa}^{i}\} \wedge$

$s\ \geq 4 \wedge\ \leq s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2\ \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{}^{}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\ )!}\cdot$$

$$\frac{1}{\left(n+2\cdot j^{sa}+\ j_{sa}-2\cdot j_{ik}-\ -2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\ -\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{}^{}-j_{ik}-\ \right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+j_{}^{}-\boldsymbol{n}-\boldsymbol{l_i}-j_{}^{})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \ +1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \le j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

$$
\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k}_1 = 0 \wedge$

$j_{sa}^{s} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa}^{s} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{s}, \ldots, j_{sa}^{i}\} \wedge$

$\boldsymbol{s} \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l} - j_{sa} + 1)} \sum_{(j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}})!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{(j_{ik}=\boldsymbol{l_i}+j_{sa}^{ik}-D-s)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{(n_i + \cdots j^{sa} + 2 \cdots_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$(D \geq \boldsymbol{n} \cdots n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

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$j_{sa}^{ik} + 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \le j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})\ j^{sa}=\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_2+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(\quad - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{s} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{(n_i-j_s+1)} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}
$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-j^{sa}\quad)!}$$

$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\quad+j_{sa}-s>\quad)\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+\quad\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-\quad\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq\quad^{sa}\leq\boldsymbol{n}+j_{sa}-\quad\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\quad>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\quad>=0\wedge$

$j_{sa}\leq j_{sa}^{s}-1\wedge j_{sa}^{ik}=j_{sa}^{s}-1\wedge j_{sa}^{s}\leq j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{s}\mathbb{k}_2,j_{sa},j_{sa}^{i}\}\wedge$

$s>\quad\wedge\quad=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\quad=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$fzS_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}})!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{(j_{ik}=\boldsymbol{l_i}+j_{sa}^{ik}-D-s)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

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$j_{sa}^{ik}+1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le \boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\big)\wedge$

$D\ge \boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\le j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}\le j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s\ge 4\wedge \boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$
{}_{fz}S_{j^{sa}}=\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})}\ \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-D-s}^{}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}}^{(n_i-j_{ik}-1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(\quad-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{s}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}\ \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\quad - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - j_{sa})}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + \quad)! \cdot (j_{ik} - j_{sa}^{ik} \quad)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} \quad \boldsymbol{l} - j_{sa})}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}} \quad)! \cdot (j^{sa} \quad - j_{sa})!} \cdot$$

$$\frac{(\quad + j_{sa} - \quad - s)!}{(\quad + j^{sa} - \boldsymbol{n} - \quad)! \cdot (\boldsymbol{n} \quad - j^{sa} - s)!} -$$

$$\sum_{(\quad = j^{sa} + j_{sa}^{ik} - j_{sa})}^{(\quad)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\left((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge\right.$$

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$$j_{sa}^{ik}+1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le \boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\vee$$

$$(D\ge\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}+1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le \boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\big)\wedge$$

$$D\ge\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$$

$$j_{sa}\le j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}\le j_{sa}^{ik}-1\wedge$$

$$\boldsymbol{s}\colon\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$$

$$s\ge 4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$$

$$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$$

$$
{}_{fz}S_{j_{ik},j}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-\cdots-s-1)}\ \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}\ \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(\quad - 1)!}{(n_{\quad} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} \quad j_{sa}^{ik})!}{(\quad - j_{ik} - \quad + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} \quad)!}{(j_{ik} + \quad - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{s} \quad \boldsymbol{l_{sa}} - s)!}{(D \quad j^{sa} - \boldsymbol{l} \quad \boldsymbol{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}$ [illegible] $) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ [illegible] $\wedge \boldsymbol{l_i}+$ [illegible] $-s=\boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}$ [illegible] $+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+$ [illegible] $\leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 >$ [illegible] $\wedge \boldsymbol{l_{sa}}+$ [illegible] $-j_{sa} \leq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}})\big) \wedge$

$D \geq$ [illegible] $< n \wedge I = \mathbb{k} >$ [illegible] $0 \wedge$

$j_{sa} \leq j_{sa}^{i}$ [illegible] $\wedge j_{sa}^{ik}=j_{sa}$ [illegible] $-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}:\{$ [illegible] $j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} =$ [illegible] $+\mathbb{k} \wedge$

[illegible] $\wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+\boldsymbol{n}-D)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\ )!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+\ j_{sa}-2\cdot j_{ik}-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\ -\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{}^{}-j_{ik}-\ \right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+\ -\boldsymbol{n}-\boldsymbol{l_i}-j_{}^{}\ )!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\left((D\geq \boldsymbol{n}<n\wedge \boldsymbol{l_s}>D-\ +1\wedge\right.$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq \boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\vee$$

$$(D\geq \boldsymbol{n}<n\wedge \boldsymbol{l_s}>D-\boldsymbol{n}+$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{}^{}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq \boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\vee$$

$$(D\geq \boldsymbol{n}<\ \wedge \boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq \boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\vee$$

$$(D\geq \boldsymbol{n}<n\wedge \boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

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$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik}\cdots sa} = \sum_{l} \sum_{(j_{ik}\cdots+\boldsymbol{n}-D)} \sum_{\cdots+\boldsymbol{n}-D}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}\cdots_2-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(\cdots 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{s}\cdots - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l}_{\quad}-\boldsymbol{l}-j_{sa})}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+\quad)!\cdot(j_{ik}-j_{sa}^{ik}\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}\quad\boldsymbol{l}_{\quad}-j_{sa})}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\quad)!\cdot(j^{sa}\quad-j_{sa})!}\cdot$$

$$\frac{(\quad+j_{sa}-\quad-s)!}{+j^{sa}-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}\quad_a-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{\quad}-\boldsymbol{l})} \sum_{(j_{ik}\quad+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\quad} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

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$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-1}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}+1)} \sum_{(n_{ik}=\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(\quad)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{s} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}
$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right.!}$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-j^{sa}\quad)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\quad+j_{sa}-s>\quad\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-\quad\wedge j_{sa}^{s}\leq j_{sa}^{ik}-$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_{z}j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 4\wedge\boldsymbol{s}=\quad+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\quad+\mathbb{k}_2$

$$fzS_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-$$

$$\sum_{k=\boldsymbol{l}}^{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1\right)}\sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D\right.}^{}\sum^{\left.j^{sa}=j_{ik}+\right.-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s}\sum^{}\left(n_{i}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)$$

$$\sum_{n_{ik}=n_{is}+}\sum_{j_{sa}^{ik}-\mathbb{k}_1}^{}\sum^{\left(=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+\right.j_{sa}^{ik}-2\cdot j_{ik}\left.s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(-\boldsymbol{n}-\mathbb{k}_1\ \mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n}\ \wedge \boldsymbol{l_s} > D - \ + 1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik}\ ^{sa}+\ a - j_{sa} \wedge$

$j_{ik}\ j_{sa}\ _{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\ > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ \ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} -}{(j_{ik}-2)! \cdot (n_i - n_{ik} - k + 1)!}
$$

$$
\frac{(n_{ik} - sa - 1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik} - j_{ik} - n_{sa} - sa)!} \cdot
$$

$$
\frac{(n_{sa} -)!}{(n_{sa} - j^{sa} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ \ )} \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ \ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

$$
\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}-s} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}-j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{\left(\boldsymbol{l_s}+j_{ik}-j_{ik}-\boldsymbol{l}\right)!\,(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j^{sa}+s-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge \mathbb{k} > 0 \wedge$

$j_{sa}^{s} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-j_{sa}^{ik}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-s)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{}\ \sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{(\ \ )}\ \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{\left(n_{is}=\right.}^{(n_i}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\quad s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D\geq\boldsymbol{n}<n\wedge\quad>D-\quad+1\wedge$

$j_{sa}^{ik}+\quad\leq j_{ik}\leq j^{sa}+\quad j_{sa}\wedge$

$j_{ik}+j_{sa}-\quad\leq j^{sa}\leq\quad+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-\quad+1=\boldsymbol{l_s}-\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\big)\vee$

$(D\geq\boldsymbol{n}<\quad\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$\quad+1\quad\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\big)\big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \le j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=j_{sa}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D}\sum_{-j^{sa}=j_{ik}+j_{sa}-j_s}$$

$$\sum_{n_i+\mathbb{k}}^{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{n_i+2\cdot j^{sa}+\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\quad 2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{l} \leq n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq {}^{a} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} \quad - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \le j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_s}+j_{sa}-}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\ \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\ \sum_{j^{sa}=j_{sa}}^{}$$

$$\sum_{}^{-j_s+1)}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}}^{n_i+\mathbb{k}}$$

$$\sum_{n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{l} < m \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq {}^{a} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} \quad - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ \ )} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{=\boldsymbol{n}^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=j_{sa}+2}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\left. \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot \right.
$$

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$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}+1}\sum_{j_{ik}+j_{sa}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}+1)}\sum_{n_{ik}+j_{ik}-\mathbb{k}_2}^{\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_i-n_{ik}}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{-n_{sa}-1)!}{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{k+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{(\ )} \sum_{j^{sa} = j_{sa}+1}^{\boldsymbol{l_s} + j_{sa} - \boldsymbol{l}} \right.$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\left. \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \right).$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}}\ \sum_{j^{sa}=j_{sa}+2}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-\quad-1)!}{(\quad)!\cdot(n_i-\quad-j_{ik}+1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(\quad+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{ik}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(+\boldsymbol{l}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Big)\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=j_{sa}^{ik}+}\sum_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}$$

$$(\quad j_s+1)$$

$$\sum_{n_i}\sum_{\mathbb{k}\,(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{n_{i}\quad n_{is}+j_{sa}^{s}-j_{sa}^{ik}\quad \mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{n_i+2\cdot j^{sa}+\quad j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{\quad i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\ \boldsymbol{n}\ \ a\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq\ ^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}\leq j_{sa}^{ik}-1\wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{s} \cdots} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}} \sum_{\cdots=\boldsymbol{n}-j^{sa}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1) \quad n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\left. \frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \right.
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{\left(j_{ik}=j_{sa}^{ik}+1\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum^{(n_i - \quad +1)} \sum_{\left(n_{is}=\right.} \quad - j_{ik})$$

$$\sum \sum^{(\ )} \sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1} \quad - n_{ik}} \quad - j^{sa} - \mathbb{k}_2)$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} \quad 2 \cdot j_{ik} - \quad - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} \quad \mathbb{k}_1 - \mathbb{k}_2} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + \quad j^{sa} + 2 \cdot j_{s} \quad - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + \quad s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \quad \boldsymbol{l} \wedge \boldsymbol{l_s} \quad D - \boldsymbol{n} \quad \wedge$

$j_{sa}^{ik} \quad \leq j^{sa} + j_{sa}^{ik} \quad j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} \quad j_{sa}^{ik} + 1 \leq j^{s} \quad \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} \quad j_{sa}^{ik} + 1 = \boldsymbol{l_s} \quad \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D + \quad - \boldsymbol{n} \wedge$

$\quad > \boldsymbol{n} \quad \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

GULDUNYA

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{l_{sa}} - s)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\left. \frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot \right.
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = \cdots + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_{is} = \boldsymbol{n} + \mathbb{k}}^{n} \sum^{(n_i - \cdots + 1)} \left(n_{is} = \boldsymbol{n} \cdots - j_{ik}\right)$$

$$\sum \sum^{(\ )} \sum_{n_{ik} = n_{is} + j_{sa}^{s} \cdots - \mathbb{k}_1} \cdots - j^{sa} - \mathbb{k}_2)$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} \cdots \cdot j_{ik} - \cdots 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} \cdots \mathbb{k}_1 - \mathbb{k}_2)} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + \cdots^{sa} + 2 \cdot j^{\cdots} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + \cdots s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \cdots \boldsymbol{l} \wedge \boldsymbol{l_s} \cdots D - \boldsymbol{n} \cdots 1 \wedge$

$j_{sa}^{ik} \cdots \leq j^{sa} + j_{sa}^{ik} \cdots j_{sa} \wedge$

$j_{ik} + j_{sa} - \cdots j_{sa}^{ik} \leq j^{sa} \leq \cdots + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} \cdots + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D + \cdots - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$\cdots \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} -}{(j_{ik}-2)! \cdot (n_{} - n_{ik} - + 1)!} \cdot
$$

$$
\frac{(n_{ik} - sa - 1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik} - j_{ik} - n_{sa} -)!} \cdot
$$

$$
\frac{(n_{sa} -)!}{(n_{sa} - j^{sa} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\boldsymbol{l_{sa}} - \boldsymbol{l_{ik}} -)! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

$$
\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$j^{\mathbb{k}_{ik}, j^{sa}} \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D}^{\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1} \right.$$

$$\left. \sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \right)$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(j_{ik}+j^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{ik}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik}+1} \sum_{\boldsymbol{l}+\boldsymbol{n}+j_{sa}-D-s}^{}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+} \sum_{\left(n_{is}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{} \sum_{\left(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)}^{}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + \boldsymbol{l} - j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(\boldsymbol{n} - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\geq \boldsymbol{n} < \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l} + j_{sa} - \boldsymbol{sa} - j_{sa}^{ik} + 2 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l} - 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$+ j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}}^{n_{ik}-j^{sa}-\mathbb{k}_2} {}^{j^{sa}+1}
$$

$$
\frac{(n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}-\boldsymbol{n}-j^{sa}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot
$$

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$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_i} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right.$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2 \Rightarrow$

$$S_{j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\right.$$

$$\left.\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\right)$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-\quad-1)!}{(\quad)!\cdot(n_i-\quad-j_{ik}+1)!}$$

$$\frac{(n_{ik}-n_{sa}-\quad}{(j^{sa}-j_{ik}-1)!\cdot(\quad+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-\quad1)!}{(n_{sa}+j_{ik}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{+\boldsymbol{l}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)\cdot$$

$$\sum_{k=\boldsymbol{l}}^{}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\sum_{\boldsymbol{l}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-}^{j_{sa}}$$

$$\sum_{n_i=}^{(j_s+1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{\mathbb{k}}$$

$$\sum_{n_i=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{n_i+2\cdot j^{sa}+\cdots-j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{\cdots-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\cdots(2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \cdots \boldsymbol{l} \cdots n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_{ik}}+\cdots-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+2 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$j_{sa}-j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik} \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=\boldsymbol{l_{sa}}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}+1)} \sum_{n_{ik}+j_{ik}-\mathbb{k}_2}^{\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - j_{ik} + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j^{sa} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right.} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - \wedge j_{sa}^{s} \leq j_{sa}^{ik} - \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z.z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$_{fz}S_{j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} + 1)} \sum_{\left(j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa}\right)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \right.$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\left. \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \right)$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l}+\boldsymbol{n}-D}^{}\right.$$

$$\left.\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\right.$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j_{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l_{sa}}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{(j_{ik}=\boldsymbol{l_i}+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{sa}=\boldsymbol{l_{sa}}+j_{sa}^{ik}-D-s)}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}^{ik})}$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k})}^{(n_i-j_s+1)}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{(n_{is}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1)}^{(\ )}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\boldsymbol{n} > \boldsymbol{n} < \boldsymbol{n} \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

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$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$$

$$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$
{}_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{} \sum_{(j_{ik}=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\left. \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \right.
$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n}\sum_{n_i=\boldsymbol{n}+\mathbb{k}\,(n_{ik}=\boldsymbol{n}_{ik}-j_{ik}-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\ \ \cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\ \ -1)!}{\left(\boldsymbol{l_s}+\ \ -j_{ik}-\boldsymbol{l}\right)!\ \ -j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j^{sa}+s-\boldsymbol{l_i}-j_{sa})\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}-\ \ _{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-\ \ _{sa}=\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\ \ >=0\wedge$

$j_{sa}\leq j_{sa}^{i}-\ \ \wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}\leq j_{sa}^{i}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,\ \ \cdots,j_{sa}^{i}\right)$

$s\geq 4\wedge\ \ =s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\ \ =\mathbb{k}_1+\ \ \Rightarrow$

$$_{fz}S_{\,j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right)} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - {}^{sa} - s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} -)} \sum_{(j_{ik} = j_{sa}^{ik} }$$

$$\sum_{(j^{sa} = j_{ik} + j_{sa} - j_s + 1)}$$

$$\sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik})}$$

$$\sum_{(n_{sa} = n_{is} + j_{sa}^{s} - j_{sa}^{ik} }^{(\ )} \sum_{\mathbb{k}_1 (n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + \cdot j_{sa}^{ik} - \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \boldsymbol{i_l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq {}^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \leq D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \le j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

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$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}-j_{sa} > \boldsymbol{l_{ik}}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+\boldsymbol{n}-1)\Big)$

$D \geq \boldsymbol{n} < n \wedge I = \geqslant 0 \wedge$

$j_{sa}^{s} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\}$

$s \geq 4 \wedge = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}_2 = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-s+1}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}-\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(\quad-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 1)!}{\left(\boldsymbol{l_s} + j_{ik} - j_{ik} - \boldsymbol{l}\right)! \, (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D - j^{sa} + s - \boldsymbol{l_i} - j_{sa}) \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + \ \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} \ _{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} \ _{a} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l} \ j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq \ + \boldsymbol{l_s} + s - \boldsymbol{n} - \ ) \vee$

$(\ \geq \boldsymbol{n} < n \ \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \ \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \ j_{ik} \leq j^{sa} + j_{s} - j_{sa} \wedge$

$j_{ik} + j_{sa} \ j_{sa}^{ik} \leq j^{sa} \leq \ + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \ \wedge \boldsymbol{l} \ + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \ j_{sa} \ < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < \ \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\boldsymbol{l}+1)!}{(j_{ik}+\boldsymbol{n}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} + 1)} \sum_{\left(j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s\right)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum^{(n_i \quad +1)} \left(n_{is} \quad - j_{ik}\right)$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_2}^{(\quad)} \sum \quad = n_{ik} \quad - j^{sa} - \mathbb{k}_2)$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + \quad a \quad s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \quad _i \boldsymbol{l} \wedge \boldsymbol{l_s} \quad D - \boldsymbol{n} \quad \wedge$

$j_{sa}^{ik} \quad _{ik} \leq j^{sa} + j_{sa}^{ik} \quad j_{sa} \wedge$

$j_{ik} + j_{sa} \quad _{sa}^{ik} \leq j^{sa} \leq \quad + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} \quad _{ik} + 1 = \quad \boldsymbol{sa} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \quad \leq \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$\quad > \boldsymbol{n} \leq \quad \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-j_{sa}^{ik}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-1)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=}^{(n_i+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{=n_{ik}}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + \quad s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \quad \boldsymbol{l} \wedge \boldsymbol{l_s} \quad D - \boldsymbol{n} \quad \wedge$

$j_{sa}^{ik} \quad \leq j^{sa} + j_{sa}^{ik} \quad j_{sa} \wedge$

$j_{ik} + j_{sa} \quad \leq j^{sa} \leq \quad + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} \quad + 1 = \quad \boldsymbol{sa} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \quad \leq \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$\quad > \boldsymbol{n} \leq \quad \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\boldsymbol{l})!}{(j_{ik}+\boldsymbol{n}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{\left(j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s\right)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{\left(n_{is} = n_i - \right.}^{(n_i - \quad + 1)} \left. - j_{ik}\right)$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1}^{(\ )} \left. - n_{ik} - j^{sa} - \mathbb{k}_2\right)$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - \quad - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2}$$

$$\frac{1}{\left(\boldsymbol{n} + \quad ^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + \quad - s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \quad \boldsymbol{l} \wedge \boldsymbol{l_s} \quad D - \boldsymbol{n} \quad \wedge$

$j_{sa}^{ik} \leq \quad \leq j^{sa} + j_{sa}^{ik} \quad j_{sa} \wedge$

$j_{ik} + j_{sa} \quad ^{ik} \leq j^{sa} \leq \quad + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} \quad + 1 = \boldsymbol{l_s} \quad \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s \quad \boldsymbol{n} \wedge$

$\quad \boldsymbol{n} \quad \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \ldots}{(j_{ik}-2)! \cdot (n_i - n_{ik} - \ldots_k + 1)!} \cdot
$$

$$
\frac{(n_{ik} - \ldots_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} \ldots j_{ik} - n_{sa} - \ldots_a)!} \cdot
$$

$$
\frac{(n_{sa} - \ldots)!}{(n_{sa} \ldots j^{sa} \ldots 1)! \ldots \boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} \ldots \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j \ldots - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} \ldots \boldsymbol{l_{sa}} - s)!}{(D + j^{\ldots} \ldots \boldsymbol{n} - \boldsymbol{l_{sa}}) \ldots (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

$$
\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_{sa}}+s-\boldsymbol{n}-j_{sa} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>=0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$S_{j_{ik},j^{sa}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\quad\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\quad-1)!}{\left(\boldsymbol{l_s}+\quad j_{ik}-\boldsymbol{l}\right)!\quad-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-\quad+s-\quad\boldsymbol{l_i}-j_{sa}\quad\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}-\quad_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-\quad_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l}-j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$D\geq\boldsymbol{n}<n\quad=\mathbb{k}>\quad0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}\quad j_{sa}-\quad j_{sa}^{s}\quad j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\quad j_{sa}^{ik},\mathbb{k}_2,j_{sa},\quad j_{sa}^{i}\right\}\wedge$

$s\geq4\wedge\boldsymbol{s}=\quad+\mathbb{k}\wedge$

$\mathbb{k}_{\quad}\quad\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}})!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{j_{sa}=j_{sa}^{ik}+1)}^{} \sum_{j_{sa}=j_{sa}^{ik}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i - j_s + 1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + \quad j^{sa} + 2 \quad {}_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < \quad \wedge \boldsymbol{l} \neq \quad {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{\left(j_{ik}=j_{sa}^{ik}\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}+1)} \sum_{a=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_2}
$$

$$
\frac{(n_i}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{-n_{sa}}{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot
$$

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$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fz^{\cdots}{}_{\cdots} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}}\sum_{n_{sa}=n_{ik}+j_{ik}-}^{(}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot\right.-s-2\cdot-\mathbb{k}_1-\mathbb{k}_2)}{(n_i-\boldsymbol{n}-\mathbb{k}_1-)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}-2\cdot j_{sa}^{ik}-\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i})!}{(D+j^{sa}+-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}-{}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq+j_{sa}^{ik}-\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq\leq\boldsymbol{n}+-\wedge$

$\boldsymbol{l_{ik}}-+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{l_i}\leq D+s-)\vee$

$(D\boldsymbol{n}n\wedge\boldsymbol{l}\neq{}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n})\Big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \le j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})\,\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}} \sum_{j^{sa}=\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\sum_{j^{sa}=j_{sa}+1}^{l_{ik}-l_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(\ )}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{j_s+1)}$$

$$\sum_{n_i=n_{is}+j_{sa}^{s}-j_{sa}^{ik}+\mathbb{k}_1}^{(\ )}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+\cdots-j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{\left(\cdots_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2\right)!}\cdot$$

$$\frac{1}{\left(\cdots 2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((\boldsymbol{\cdots}\geq\cdots<n\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq\cdots^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$\boldsymbol{l_i}\leq D+s-\boldsymbol{n})\vee$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

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$j_{sa}^{ik} \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \le D + s - \boldsymbol{n})) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \le j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{-\boldsymbol{l}+1}
$$

$$
\sum_{n_{}+\mathbb{k}\,(n_{ik}=\boldsymbol{n}}^{n} \sum_{-j_{ik}+1)}^{(n_{} \quad -\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{a - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\ \cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\ -1)!}{\left(\boldsymbol{l_s}+\ -j_{ik}-\boldsymbol{l}\right)!\ -j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\ \boldsymbol{l_i})!}{(D-\ ^{sa}+s-\ \boldsymbol{l_i}-j_{sa}\ \cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((D\geq \boldsymbol{n}<n\wedge \boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge \boldsymbol{l_s}\leq D-\boldsymbol{n}+\ \wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq \boldsymbol{n}\ _{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}\ _{a}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l}\ _{i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq\ +\boldsymbol{l_s}+s-\boldsymbol{n}-\ )\vee$$

$$(\ \geq \boldsymbol{n}<n\ \neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\ \leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\ j_{ik}\leq j^{sa}+j_{s}\ -j_{sa}\wedge$$

$$j_{ik}+j_{sa}\ j_{sa}^{ik}\leq j^{sa}\leq\ +j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1\ \boldsymbol{l}\wedge\boldsymbol{l}\ +j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$$

$$D\ j_{sa}\ <\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\Big)\wedge$$

$$D\geq\boldsymbol{n}<\ \wedge I=\mathbb{k}>=0\wedge$$

$$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}\leq j_{sa}^{ik}-1\wedge$$

$$\boldsymbol{s}\colon\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$$

$$s\geq 4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$$

$$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})\,\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

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$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ \ )}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=}^{(n_i}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{(\ \ )}\sum_{(n_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2}\cdot$$

$$\frac{1}{(\boldsymbol{n}+j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\quad s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\quad{}_i\boldsymbol{l}\wedge\boldsymbol{l_s}<D-\quad+1\wedge$$

$$j_{sa}^{ik}\leq\quad\leq j^{sa}+j_{sa}^{ik}\quad{}_{sa}\wedge$$

$$j_{ik}+j_{sa}-\quad\leq j^{sa}\leq\quad+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}\quad{}_s+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$D+s-\boldsymbol{n}\quad\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1)\vee$$

$$(\quad<n\wedge\boldsymbol{l}\neq\quad{}_i\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$$

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$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{\cdots})}^{\boldsymbol{l_s}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}\cdots D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right.}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\right.-j_{sa})!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\left(\right.+j_{sa}-j^{sa}-)!}-$$

$$\sum_{(j_{ik}=\boldsymbol{l_i}+}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{-D-s)}\sum_{-j_{sa}^{ik}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+\right.j^{sa}+2\left.\right.^{ik}_{sa}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$(D\geq \boldsymbol{n}\ldots n\wedge \boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge \boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq \boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$$

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$\boldsymbol{l_i} \le D + s - \boldsymbol{n}) \vee$

$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l} \ne \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \le D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_{sa}} \le D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \le D + s - \boldsymbol{n})\big) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \le j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{\cdots} = \sum_{k=\boldsymbol{l}} \sum_{(j_{\cdots}} \sum_{j^{sa}=j_{sa}+1} \sum_{=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(\quad-1)!}{(n_{\quad}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{s}}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}}{(\quad-j_{ik}-\quad+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}^{ik})!}{(j_{ik}+\quad-j^{sa}-\boldsymbol{l_{ik}})!\,(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{s}\quad\boldsymbol{l_{sa}}-s)!}{(D\quad j^{sa}-\boldsymbol{n}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},\ldots} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}\ldots} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.
$$

$$
\sum_{=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik}-2)!\cdot(n_i - n_{ik} - j_{ik} + 1)!}\cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)!\cdot(n_{ik} + j_{ik} - n_{sa} - j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right) +$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=j_{sa}+2}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l_{ik}}-j_{sa}^{ik}+1}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\ )!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+\ j_{sa}-2\cdot j_{ik}-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\ -\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{}^{}-j_{ik}-\ \right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+\ -\boldsymbol{n}-\boldsymbol{l_i}-j_{}^{}\ )!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{s}}\ D+j_{sa}-\boldsymbol{n}$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-$

$j_{ik}+j_{sa}-j_{sa}^{ik}+\ j^{sa} \leq \boldsymbol{n}+j_{sa}-\ \wedge$

$\boldsymbol{l}-j_{sa}^{ik}+1\ \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}\ j_{sa}^{ik}-j_{sa} \geqslant \boldsymbol{l_{ik}} \wedge$

$D > \boldsymbol{n} < n \wedge I=\ =0 \wedge$

$j_{sa}\ j_{sa}-1 \wedge j_{sa}^{ik}=j_{s}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{i}\ j_{sa}^{i}\right\} \wedge$

$s\ 4 \wedge\ s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2\ \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{\,j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{i}^{}}^{(\ )}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa}^{} - \mathbb{k}_{} - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 -)!}\cdot$$

$$\frac{1}{(+ 2\cdot j^{sa} + j_{sa}^{} - j_{ik} - 2\cdot j_{sa})!}\cdot$$

$$\frac{(-\boldsymbol{l}-1)!}{(\boldsymbol{l_s} + j - j_{ik} - \cdot(j_{ik} - j_{sa}^{ik} - 1)!}\cdot$$

$$\frac{(D -)!}{(j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j)!\cdot(\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + - j_{sa}^{ik} \leq j^{} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \wedge \boldsymbol{l_{sa}} + - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_i} \leq + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq \leq j^{sa} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$- j \quad 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{s}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}}^{n_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(j_{ik}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}-\boldsymbol{n}-j^{sa}+1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot
$$

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$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_i} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right.$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \quad + \mathbb{k}_2 \Rightarrow$

$$f_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}\right.$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-$$

$$\frac{(n_{ik}-n_{sa}-$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j_{ik}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(\boldsymbol{l}+j^{sa}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)\cdot$$

$$\sum_{k=\boldsymbol{l}}^{}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\sum_{=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-}$$

$$\sum_{}^{(j_s+1)}$$

$$\sum_{n_i+\mathbb{k}\,(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{n_i+m_{is}+j_{sa}^{s}-j_{s}^{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{n_i+2\cdot j^{sa}+\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{\boldsymbol{2}_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{l} \geq n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa} - j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-\cdots)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=j_{ik}\cdots-j_{sa}^{ik}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}\cdots+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}\cdots-\mathbb{k}_2}
$$

$$
\frac{(n_i \cdots}{(j_{ik}-2)\cdots(n_i-n_{ik}-j_{ik}+1)!} \cdot
$$

$$
\frac{\cdots_{ik}-n_{sa}\cdots1)!}{\cdots^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot
$$

$$
\frac{(n_{sa}-1)!}{\cdots j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!} \cdot
$$

$$
\left. \frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!} \cdot
$$

$$
\left. \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \right) \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_i-\quad-1)!}{(j_{ik}-\quad!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{i}-\quad n_{sa}-1)!}{{}^{sa}-j_{ik}\quad\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Big)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right.}$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-j^{sa}\quad)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\quad+j_{sa}-s=\quad\wedge$

$D+j_{sa}^{ik}-\boldsymbol{n}<\boldsymbol{l_{ik}}\leq D+\boldsymbol{l}\quad j_{sa}^{ik}-\boldsymbol{n}\quad1\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{ik}=j_{sa}-1\wedge j_{sa}<j_{sa}^{ik}-1$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j\quad\mathbb{k}_2,j_{sa},\quad j_{sa}^{i}\right\}\wedge$

$s\geq4\wedge\boldsymbol{s}=s+\quad\wedge$

$\mathbb{k}_z:z\quad2\wedge\mathbb{k}=\mathbb{k}_1+\quad\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}$$

$$\sum_{n_{ik}=n_{is}+}$$

$$\frac{\left(n_i+2\cdot j^{sa}+\right.\cdot j_{sa}^{ik}-2\cdot j_{ik}\ s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{-\boldsymbol{n}-\mathbb{k}_1\ \mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+\ \cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n}\ \ \wedge \boldsymbol{l} \neq\ \ _{\boldsymbol{i}}\boldsymbol{l} \wedge\ \ \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j\ \ j_{sa}^{ik} \wedge$

$j_{ik}\ \ j_{sa}\ \ _{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\ \ > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>=0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\} \wedge$

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$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}}^{n_{ik}+j_{ik}-j^{sa}-} \sum_{-j^{sa}+1}
$$

$$
\frac{(n_i \quad -1)}{(j_{ik}-2)!\,(n_i-n_{ik} \quad +1)!} \cdot
$$

$$
\frac{(n_{ik}-n_{sa} \quad 1)!}{(j^{sa}-j_{ik} \quad (n_{ik}+j_{ik} \quad -n_{sa}-j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} \quad)}{{}_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l} \quad _{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik} \quad +1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!} \cdot
$$

$$
\frac{(D+j \quad -\boldsymbol{l_{sa}}-s)!}{(D \quad ^{sa}-\boldsymbol{n} \quad -\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!} \cdot
$$

$$
\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$S_{j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+j_{sa}^{ik}-s+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\ \cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\ -1)!}{\left(\boldsymbol{l_s}+\ -j_{ik}-\boldsymbol{l}\right)!\ -j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j^{sa}+s-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}-j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l}-j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_s}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}-j_{sa}-j_{sa}^{s}\leq j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\ j_{sa}^{ik},\mathbb{k}_2,j_{sa},\ j_{sa}^{i}\right\}\wedge$

$s\geq 4\wedge\boldsymbol{s}=\ +\mathbb{k}\wedge$

$\mathbb{k}_{\ }\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})}\ \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l}} \sum_{(j_{ik} = \boldsymbol{n} - D)}^{\boldsymbol{l_i} + j_{sa}} \sum_{j^{sa} = j_{ik} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 2}^{1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n} \sum_{(\mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j \quad \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{(\quad)} \sum_{j^{sa} = \boldsymbol{l_s} + \boldsymbol{n} - D}^{\boldsymbol{l_s} + j_{sa} - \boldsymbol{l}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\ \cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\ -1)!}{\left(\boldsymbol{l_s}+\ -j_{ik}-\boldsymbol{l}\right)!\ -j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\ \boldsymbol{l_i})!}{(D-\ ^{sa}+s-\ \boldsymbol{l_i}-j_{sa}\ \cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}-\ _{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-\ _{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l}-j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_s}\leq D+\boldsymbol{l_s}+j_{sa}-\ \boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge\ =\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}\leq j_{sa}-\ \ j_{sa}^{s}\leq j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\ \ j_{sa}^{ik},\mathbb{k}_2,j_{sa},\ \ j_{sa}^{i}\right\}\wedge$

$s\geq 4\wedge\boldsymbol{s}=\ +\mathbb{k}\wedge$

$\mathbb{k}_{\ }\ \wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)}\ \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}\ \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - 1)} \sum_{(j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa})}^{\boldsymbol{l_i} + j_{sa} - s + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}_1 + \mathbb{k}_2 - j_{ik} + 1}^{n} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{\left(\boldsymbol{l_s}+j_{ik}-j_{ik}-\boldsymbol{l}\right)!\,(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((D\geq \boldsymbol{n}<n\wedge \boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge \boldsymbol{l_s}\leq D-\boldsymbol{n}+\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq \boldsymbol{n}\ _{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}\ _{a}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l}\ j_{sa}-s>\boldsymbol{l_{sa}}\wedge$$

$$\boldsymbol{l_i}\leq D+s-\boldsymbol{n})\vee$$

$$(\ \geq \boldsymbol{n}<n\ \neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\ \leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\ j_{ik}\leq j^{sa}+j_{s}\ -j_{sa}\wedge$$

$$j_{ik}+j_{sa}\ j_{sa}^{ik}\leq j^{sa}\leq\ +j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1\ \ \wedge\ +j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$$

$$\boldsymbol{l_{ik}}\leq D+\ ^{ik}-\boldsymbol{n}\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\big)\big)\wedge$$

$$\geq \boldsymbol{n}<\ \wedge I=\mathbb{k}>=0\wedge$$

$$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}\leq j_{sa}^{ik}-1\wedge$$

$$\boldsymbol{s}\colon\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$$

$$s\geq 4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$$

$$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{sa}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(\quad - 1)!}{(n_{\quad} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}}{(\quad - j_{ik} - \quad + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=j_{sa}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

$$
\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}
$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=} \sum_{(\quad)} \sum_{j^{sa}=j_{sa}+1}^{-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j \quad \mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - \quad \cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s} - \quad - 1)!}{\left(\boldsymbol{l_s} + \quad j_{ik} - \boldsymbol{l}\right)! \quad - j_{sa}^{ik} - 1)}\cdot$$

$$\frac{(D \quad \boldsymbol{l_i})!}{(D \quad ^{sa} + s - \quad \boldsymbol{l_i} - j_{sa} \quad \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + \quad \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} \quad _{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} \quad _{sa} = \boldsymbol{l_{ik}} \wedge$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \quad D + \boldsymbol{l_s} + j_{sa}^{ik} - \quad - 1)$

$(\quad \geq \boldsymbol{n} < n \wedge \quad \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \quad \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \quad j_{ik} \leq j^{sa} + j_{sa} \quad - j_{sa} \wedge$

$\quad + j_{sa} \quad j_{sa}^{ik} \leq j^{sa} \leq \quad + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \quad \wedge \quad + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \quad j_{sa} \quad < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < \quad \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-1)!}{(\boldsymbol{l_{ik}}-j_{ik}-1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(D+j^{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot
$$

$$
\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}
$$

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$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \boldsymbol{l_i} + j_{sa} - s \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j \right. \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot $$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\ \sum_{(j_{ik}=j_{sa}^{ik}}\ \sum_{j^{sa}=\boldsymbol{l_s}+}^{-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{-j_{ik}+1)}^{(n_i-j_{ik}-}\ \sum_{=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}}{-j_{ik}-2)!\,(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(-n_{sa}-1)!}{-j_{ik}-1)!\,(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\ \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right)} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq - \boldsymbol{n} +$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq {}^{sa} \leq \boldsymbol{n} + j_{sa} -$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{l} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - \wedge j_{sa}^{ik} = j - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{ , j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} \neq + \mathbb{k} \wedge$

$\wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{\boldsymbol{l}=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik})} \sum_{(j_{ik}=\boldsymbol{l_{sa}}-\boldsymbol{l}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{}^{}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\ \ )!}\cdot$$

$$\frac{1}{(n+2\cdot j^{sa}+\ \ _{sa}-2\cdot j_{ik}-\ \ -2\cdot j_{sa})!}\cdot$$

$$\frac{(\ \ -\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{}^{}-j_{ik}-\ \ \right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\ \ \boldsymbol{l_i})!}{(D+j^{sa}+j_{}^{}-\boldsymbol{n}-\boldsymbol{l_i}-j_{}^{})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \ \ \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+\ \ -j_{sa}^{ik} \leq j^{\ \ } \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \ \ \wedge \boldsymbol{l_{sa}}+\ \ -j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+\ \ -\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+\ \ -\boldsymbol{n}-1) \vee$

$(D \geq \boldsymbol{n}\ \ \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \ \ \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq \ \ \leq j^{sa}\ \ j_{sa} \wedge$

$j_{ik}+j_{sa}-\ \ ^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l}\ \ -j_{s}\ \ 1 > \boldsymbol{l_s} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_{sa}}+s-\boldsymbol{n}-j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \le D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l} \ne \ {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \le D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \le D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \le j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\sum_{j_{ik}, j^{sa}} \sum_{k} \sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(\quad - 1)!}{(n_{\quad} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{s}} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} \quad j_{sa}^{ik})}{(\quad - j_{ik} - \quad + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + \quad - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \quad - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{s} - \boldsymbol{l_{sa}} - s)!}{(D \quad j^{sa} - \quad \boldsymbol{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ \ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{sa}}-j_{sa}+1 > \boldsymbol{l_s} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_{sa}}+s-\boldsymbol{n}-j_{sa}$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\Big) \wedge$

$n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j^{sa} + \boldsymbol{l_{sa}} - j_{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\;-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\left(n_{is}=n_i-n_{ik}+j_{ik}\right)}^{(n_i-\boldsymbol{l}+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)}\sum_{\left(n_{ik}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}-s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D\geq\boldsymbol{n}<n\wedge\quad_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}^{ik}-\boldsymbol{n}<\boldsymbol{l_{ik}}\leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1\Big)\vee$

$(D-\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\quad_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$

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$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\sum_{j_z \supset j_{ik}, j} \sum_{\boldsymbol{l}=\boldsymbol{l}\,(j_{ik}=j-j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}^{}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{}^{}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\ \ )!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+\ \ j_{sa}^{}-2\cdot j_{ik}-\ \ -2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\ \ -\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{}^{}-j_{ik}-\ \ \right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\ \ \boldsymbol{l_i})!}{(D+j^{sa}+\ \ \boldsymbol{n}-\boldsymbol{l_i}-j_{}^{}\ \ )!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{s}}\ \ D+j_{sa}-\boldsymbol{n}$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-$

$j_{ik}+j_{}^{}-j_{sa}^{ik}+\ \ j^{sa} \leq \boldsymbol{n}+j_{sa}\ \ \wedge$

$\boldsymbol{l}\ \ -j_{sa}^{ik}+\ \ \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}\ \ j_{sa}^{ik}-j_{sa} \geqslant \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \ \ = 0 \wedge$

$j_{sa} \leq j_{sa}\ \ -1 \wedge j_{sa}^{ik} = j_{s}\ \ -1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{i}\ \ j_{}^{}, j_{sa}^{i}\right\} \wedge$

$s\ \ 4 \wedge\ \ s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2\ \ \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\ \ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}\right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{i_l}}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{sa}}-\boldsymbol{i_l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot(j^{sa}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{i_l}}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \leq D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_{sa}} = \sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{\left(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}\right)}^{\boldsymbol{l_{sa}} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1} \sum_{j^{sa} = j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!\cdot\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - \quad - 2\cdot j_{sa}\right)} \cdot$$

$$\frac{(D - \boldsymbol{l_i}}{(D + s - \boldsymbol{n}\quad)!\ \boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \quad j_{sa} \leq j_{sa} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{sa}}-\ _{\boldsymbol{i}}\boldsymbol{l}+1} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)!\cdot(n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)!\cdot(n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)!\cdot(\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{(\boldsymbol{l_{ik}} - {}_{i}\boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - {}_{i}\boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} -$$

$$\sum_{k={}_{i}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(\ )}{(D - s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} \quad _{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \quad >= 0 \wedge$

$j_{sa}^{i} \leq j_{sa}^{i} - \quad j_{sa}^{ik} = j_{sa}^{s} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{i} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \ldots, j_{sa}^{i}\}$

$s \geq 4 \wedge \quad = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \quad \mathbb{k}_1 + \quad \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k={}_{i}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{ik}}+j_{sa}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - {}_{i}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{i}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right.} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!}$$

$$\sum_{k=} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - \cdots - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} - 2 \cdot j^{sa} + 2 \cdot j_{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{sa}^{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} - j_{sa} + j_{sa}^{ik} \wedge \boldsymbol{l_{ik}} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik}, j^{sa}} = \sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - {}_{i}\boldsymbol{l} - j_{sa} + 1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}$$

$$\frac{\left(\boldsymbol{l_{ik}}\quad_{\boldsymbol{i}}\boldsymbol{l}-j_{sa}^{\quad}\right)}{\left(\boldsymbol{l_{ik}}-j_{ik}-\ _{\boldsymbol{i}}\boldsymbol{l}+\quad\right)\cdot\left(j_{ik}-j_{sa}^{ik}\quad\right)!}\cdot$$

$$\frac{j_{sa}-\boldsymbol{l}_{\boldsymbol{j}}\quad-s)!}{(D+\quad-\boldsymbol{n}\quad)!\quad-s)!}\ -$$

$$\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\quad\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+2\cdot j\quad+2\cdot j_{sa}^{ik}-\quad\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(\quad-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\left(\boldsymbol{n}\quad\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}\quad n\wedge\boldsymbol{l}=\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\quad\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq\quad+j_{sa}^{ik}-\quad a\wedge$

$j_{i\quad}\quad_{sa}\quad j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\quad>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$

$D\quad\quad<n\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}\leq j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}} - \ {}_{i}\boldsymbol{l}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \ldots}{(j_{ik}-2)! \cdot (\ldots - n_{ik} - \ldots + 1)!} \cdot
$$

$$
\frac{(n_{ik} - \ldots - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} \ldots - j_{ik} - n_{sa} - \ldots)!} \cdot
$$

$$
\frac{(n_{sa} - \ldots}{(n_{sa} \ldots - \boldsymbol{n} \ldots - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \ldots \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} \ldots \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D \ldots j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j \ldots - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} -
$$

$$
\sum_{k=\ {}_{i}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{\left(\ldots + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \ldots - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}
$$

$$
\ldots D \geq \boldsymbol{n} < \ldots \wedge \boldsymbol{l} = \ {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge
$$

$$
j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge
$$

$$
j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge
$$

$$
\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge
$$

$$
\boldsymbol{l_{ik}} \leq D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge
$$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\ {}_{\boldsymbol{i}}\boldsymbol{l}}^{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\ {}_{\boldsymbol{i}}\boldsymbol{l}-j_{sa}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{a=j_{ik}+\ -j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{-j_{ik}+1)}^{(n_i-j_{ik}-\ +1)} \sum_{=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-\ \mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik}}{-2)!\cdot(n_i - n_{ik} - j_{ik} + 1)!}\cdot
$$

$$
\frac{(\ - n_{sa}\ 1)!}{a - j_{ik} - 1)!\ n_{ik} + j_{ik} - n_{sa} - j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\ {}_{\boldsymbol{i}}\boldsymbol{l}-j_{sa}^{ik}\right)!}{\boldsymbol{-ik} - j_{ik} - \ {}_{\boldsymbol{i}}\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}-s)!} -
$$

$$
\sum_{k=\ {}_{\boldsymbol{i}}\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik})}^{(\ \ )} \sum_{j^{sa}=j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ \ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!\cdot\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa}\right)!}\cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}
$$

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$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{\cdot} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{sa}} - {}_{\boldsymbol{i}}\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\;-$$

$$\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=j_{s}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}\sum_{n_{sa}=}^{\ -j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{s}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\ )!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D+j_{sa}-\ \wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}<\ +j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-\ _{sa}>\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\ >=0\wedge$

$j_{\ }\leq j_{sa}^{i}-\ \ j_{sa}^{ik}=j_{s}-1\wedge j_{sa}^{s}\leq j_{sa}^{i}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,\ \cdots,j_{sa}^{i}\}$

$s\geq 4\wedge\ =s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\ =\mathbb{k}_1+\ \Rightarrow$

$$_{fz}S_{\,j_{ik},j^{sa}}=\left(\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{ik}}+j_{sa}-\ _{i}\boldsymbol{l}-j_{sa}^{ik}+1}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\left.\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot\right.$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-{}_{i}\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(-s)!}\Bigg)\cdot$$

$$\left(\sum_{k=\ {}_{i}\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\ \sum_{(j_{ik}=j_{sa}^{ik})}^{\ }\ \sum_{j^{sa}=j_{sa}+1}^{\ {}_{i}\boldsymbol{l}+j_{sa}^{ik}+1}\right.$$

$$\left.\sum_{n_i=\boldsymbol{n}+}^{n}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{j_{ik}}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\right.$$

$$\frac{(n_i--1)!}{(j_{ik}-\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n-n_{sa}-1)!}{-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-{}_{i}\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}}-\ {}_{i}\boldsymbol{l}+1\right)}\ \sum_{(j_{ik}=j_{sa}^{ik})}^{\ }\ \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\ {}_{i}\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\ {}_{i}\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} -} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - {}_{i}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{i}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - \right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (} \cdot$$

$$\frac{(D +} \left(\frac{- \boldsymbol{l_{sa}} -}{(D +} \right.$$

$$\sum_{k=} \sum_{j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i} \sum_{+\mathbb{k}\,(n_{ik}=n_i} \sum_{-j_{ik}-\mathbb{k}_1+1)\; n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i + 2 \cdot \right)!}{- \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} +} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq$ $< n \wedge \boldsymbol{l} =$ $\boldsymbol{l} \cdot \boldsymbol{l_{sa}} \leq D +$ $j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} -$ $j_{sa} + j_{sa}^{ik} -$ $- 1 \wedge$

$j_{ik} +$ $- j_{sa}^{ik} +$ $\leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} +$ $> \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{n}$ $\wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}} -\ {}_{i}\boldsymbol{l}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \ {}_{i}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \ {}_{i}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} \right) +
$$

$$
\left(\sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}} -\ {}_{i}\boldsymbol{l}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}} -\ {}_{i}\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \ {}_{i}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \ {}_{i}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\ \boldsymbol{l}}\ \sum_{(j_{ik}=j_{sa}^{ik})}^{(\ )}\ \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}\ \sum_{n_{sa}=n_{ik}}^{\ \ -\mathbb{k}_2}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}$$

$$\frac{(\ \ }{(D-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ \boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}_{\ }-j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l}_{\ }+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$D\geq\boldsymbol{n}<n\wedge\ =\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}\leq j_{sa}-1\wedge j_{sa}\leq j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\ j_{sa}^{ik},\mathbb{k}_2,j_{sa},\ j_{sa}^{i}\}\wedge$

$s\geq 4\wedge\boldsymbol{s}=\ \mathbb{k}\wedge$

$\mathbb{k}_{\ }=\ \wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\ \boldsymbol{l}}\ \sum_{(j_{ik}=j_{sa}^{ik})}^{(\ )}\ \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!}$$

$$\sum_{l\,(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}} \cdot$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(\quad=n_i-j_{ik}+1)\ n_{sa}=n_{ik}} \cdot \quad {}^{sa}-\mathbb{k}_2$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} \quad - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\quad + 2 \cdot j^{sa} + 2 \cdot \quad - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{\quad + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq \quad - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq \quad \leq j^{sa} + j \quad - j_{sa} \wedge$

$j \quad + j_{sa} - j_{sa} \quad \leq j^{sa} \leq \quad + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} \quad j_{sa}^{ik} + 1 = \boldsymbol{l_s} \quad + j_{sa}^{ik} \quad > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D \quad j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \quad D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \quad \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \quad j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S}_{j_{ik}} \sum_{k=\ _{i}\boldsymbol{l}\ (} \sum_{} \sum_{j^{sa}=j_{sa}} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=} \sum_{-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{n_i - n_{ik} - 1)!}{)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{s} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\ _{i}\boldsymbol{l}\ (} \sum_{j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}\big) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa}\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa} \leq j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s} \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \cdots \wedge$

$\mathbb{k}_z: 2 \cdots 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1} \sum_{j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D} \right.$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \left. \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \right)$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\ \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}-}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right)} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - \right. - j_{sa})!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\quad + j_{sa} - j^{sa} \quad)!}\Bigg) -$$

$$\sum_{k} \binom{}{} \sum_{(j_{ik}=j^{sa}+ \quad -j_{sa})} j^{sa} \quad j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1 \quad -D-s$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i + \Delta^{sa} + 2 \quad _{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$((D > \quad n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 2 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

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$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$$

$$D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 2 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}})) \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$$

$$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z\ldots,j^{sa}} = \sum_{k=\boldsymbol{l}\ (\ldots}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+\ldots} \sum_{=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{\ldots\ j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{i}^{}}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}^{}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-)!}\cdot$$

$$\frac{1}{(+2\cdot j^{sa}+ j_{sa}^{}- j_{ik}- -2\cdot j_{sa})!}\cdot$$

$$\frac{(-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{}-j_{ik}-\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!\right.}\cdot$$

$$\frac{(D-_i)!}{(+j^{sa}+\boldsymbol{n}-\boldsymbol{l_i}-j_{}!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{} + j_{sa} - j_{sa}^{} + 1 \leq j^{} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge + j_{sa}^{ik} > \boldsymbol{l_{ik}}) \vee$

$(D \geq \boldsymbol{n} \wedge \boldsymbol{l_s} > D - + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{s}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}} \sum_{n_{sa}=\boldsymbol{n}} \quad (n_i-j_{ik}-\mathbb{k}_1+1) \quad n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \quad {}^{sa}+1
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{sa}} - j_{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\left. \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot \right.
$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{\left(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}\right)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{ik}=n_{is}+\mathbb{k}_2-j_{ik}+1\right)}^{(n_i-j_{ik}+\mathbb{k}_2+1)} \sum_{j^{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_2)!}{(j_{ik} - \mathbb{k}_2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\left(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)}^{(\ )}$$

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$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1$ $-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots\right.$

$s\geq5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z$ $2\wedge\mathbb{k}=\mathbb{k}_1$ $\mathbb{k}_2\Rightarrow$

$$_{fz}S_{\,j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\left.\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\right)\cdot$$

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$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\boldsymbol{l} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\ \sum_{\left(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-\right.\ 1\right)}^{\boldsymbol{l_{sa}}+1}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{(\ \ -j_{ik}+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_i-j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(\ \ -n_{ik}-\ \ -1)!}{(j_{ik}-2)!\cdot(\ \ -n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{\ \ }-n_{sa}-1)!}{{}^{sa}-j_{ik}\ \ !\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\ \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum^{(\ )}_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right.!}$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_{ik}}}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+2 \leq \boldsymbol{l} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}<j_{sa}^{ik}-1$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \ldots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \ldots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s}=s+\ldots \wedge$

$\mathbb{k}_z: 2\ldots 2 \wedge \mathbb{k}=\mathbb{k}_1+\ldots \Rightarrow$

$$fzS_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\ \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-}\sum_{=j_{ik}+j_{sa}-j_{sa}}$$

$$\sum_{n_i}^{(j_s+1)}\sum_{\mathbb{k}}^{}\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)$$

$$\sum_{n_i}^{}\sum_{m_{is}+j_{sa}^{s}-j_{s}^{ik}}^{}\sum_{\mathbb{k}_1}^{(\ \ )}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(\boldsymbol{n_i}+2\cdot j^{sa}+\right.\left.j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(\boldsymbol{n_i}-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{l} \leq n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D - \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa} - \quad \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{} \sum_{j^{sa}=j_{sa}-j_{sa}^{ik}}^{} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

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$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\ \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_s}+1}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{j^{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1)!}{(j_{ik}-\mathbb{k}_2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\ \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right.$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1} \sum_{j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D}^{n} \sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )}\sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}+\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{sa}-s-2\cdot j_{ik}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{sa}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_i})!}{(D+j^{sa}+\boldsymbol{l_i}-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{sa}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1\geq\boldsymbol{l_s}\wedge\boldsymbol{l_{ik}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}<n\wedge\mathbb{l}=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{ik}-1\wedge j_{sa}^{s}-j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l}_{\boldsymbol{s}}-\boldsymbol{l}-j_{sa})}{(\boldsymbol{l}_{\boldsymbol{ik}}-j_{ik}-\boldsymbol{l}+\quad)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\quad \boldsymbol{l}_{sa}-s}{(\quad j^{sa}-\boldsymbol{n}-\quad)!\cdot(\quad -j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+\quad-j_{sa})}^{\boldsymbol{l}_s+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l}_i+\boldsymbol{n}+j_{sa}-D-s}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l}_{\boldsymbol{s}}-\boldsymbol{l}-1)!}{(\boldsymbol{l}_{\boldsymbol{s}}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l}_{\boldsymbol{i}})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l}_{\boldsymbol{i}}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l}_{\boldsymbol{s}} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{\left(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-j_{sa}\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{ik}=\mathbb{k}_2-j_{ik}+\right)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\left(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)}^{(\ )}
$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right.$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{\boldsymbol{n}} S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l} - j_{sa} + 1)} \sum_{(j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)}\sum_{sa}^{}=n_{ik}+j_{ik}-j_{\quad}-\mathbb{k}_2)$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\quad-s-2\quad-\mathbb{k}_1-\mathbb{k}_2\right)}{(n_i-\boldsymbol{n}\quad\quad)!}\cdot$$

$$\frac{}{\left(\boldsymbol{n}+2\cdot j^{sa}\quad\cdot j_{sa}^{ik}-\quad j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{\quad s}{\quad+j_{sa}^{ik}-j\quad-\boldsymbol{l})!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{-\boldsymbol{l_i})!}{(D+j^{sa}+\quad-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}\quad D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j\quad\leq j^{sa}+\quad-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq\quad\leq\boldsymbol{n}+\quad-\quad\wedge$

$\boldsymbol{l_{ik}}-\quad+1=\boldsymbol{l_s}\wedge\boldsymbol{l_s}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\quad=\mathbb{k}>\quad\wedge$

$j_{sa}\quad-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}\quad j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$\quad=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j_{ik}-\boldsymbol{s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{i}^{}}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_{}-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-)!}\cdot$$

$$\frac{1}{(+2\cdot j^{sa}+ j_{sa}^{} - j_{ik} - 2\cdot j_{sa})!}\cdot$$

$$\frac{(-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j - j_{ik} - \cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!\right.}\cdot$$

$$\frac{(D-_i)!}{(+j^{sa}+\boldsymbol{n}-\boldsymbol{l_i}-j!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}-1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l}-j_{sa}^{ik}+1 \leq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}-j_{sa}^{ik}-j_{sa} \geq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=-0 \wedge$

$j_{sa} \leq j_{sa}-1 \wedge j_{sa}^{ik}=j_{s}-1 \wedge j_{sa}^{s}<j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, \mathbb{k}_2, \cdots, j_{sa}^{i}\} \wedge$

$s \leq s \wedge s \leq s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{}^{}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\ \ )!}\cdot$$

$$\frac{1}{(n+2\cdot j^{sa}+\ \ j_{sa}\ \ 2\cdot j_{ik}\ \ -2\cdot j_{sa})!}\cdot$$

$$\frac{(\ \ -\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{}^{}-j_{ik}-\ \ \right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+\ \ \boldsymbol{n}-\boldsymbol{l_i}-j_{}^{}\ \ )!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\left((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\ \ +1\wedge\right.$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\vee$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>\ \ -\boldsymbol{n}+$$

$$j_{sa}^{ik}+1\ \ j_{ik}\leq j^{sa}+j_{}^{}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\ \ j^{sa}\ \ \boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\vee$$

$$(D\geq\boldsymbol{n}<\ \ \wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\left.\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\right)\wedge$$

$$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} + n_{sa} - 1)!}{(j^{sa} - j_{ik} + 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

$$
\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}_1>0\wedge$

$j_{sa}^{s}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}^{ik}-1\wedge j_{sa}^{s}\leq j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{ik}-\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa}^{ik}+\cdots,j_{sa}^{ik}\}\wedge$

$s\geq 5\wedge s=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$fzS_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}})!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{(j_{ik}=\boldsymbol{l_i}+j_{sa}^{ik}-D-s)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + \boldsymbol{n} - j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

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$j_{sa}^{ik}+1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le \boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\big)\wedge$

$D\ge\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\le j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\ge 5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{j^{sa}=\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+1}^{D-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}}^{(n_i-j_{ik}-\mathbb{k}_2+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-1)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-
$$

$$
\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa}\right)!}$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)!\cdot\left(j_{ik} - j_{sa}^{ik} - 1\right)!}\cdot$$

$$\frac{(D - \boldsymbol{l_i}}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})!\cdot(\ + j_{sa} - j^{sa}\ )!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \ + j_{sa} - s > \ ) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + \ \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - \ \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq \ ^{sa} \leq \boldsymbol{n} + j_{sa} - \ \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \ > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \ > 0 \wedge$

$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1 \ _{sa}^{ik}, \mathbb{k}_2, j \ \cdots, j_{sa}^{i}\right\} \wedge$

$s > \ \wedge \ = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \ = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}})!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{\left(j_{ik}=\boldsymbol{l_i}+j_{sa}^{ik}-D-s\right)}^{\left(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}\right)} \sum_{j_{sa}-j_{sa}^{ik}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}$$

$$\sum_{k=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + \quad j^{sa} + 2 \quad {}_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \boldsymbol{n} \quad \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$$

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$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-s+1}^{-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}-\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{\quad}}-\boldsymbol{l}-j_{sa})}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+\quad\cdot(j_{ik}-j_{sa}^{ik}\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}\quad\boldsymbol{l}_{\quad}-j_{sa})}{(j_{ik}+\boldsymbol{\quad_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\quad\cdot(j^{sa}\quad-j_{sa})!}\cdot$$

$$\frac{(\quad+j_{sa}-\quad-s)!}{+j^{sa}-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}\quad_{a}-j^{sa}-s)!}-$$

$$\sum_{\quad=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\left((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge\right.$$

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$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-\cdots-s-1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(\quad-1)!}{(n_{\quad}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{s}}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}}{(\quad-j_{ik}-\quad+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}^{ik})!}{(j_{ik}+j_{sa}-j^{sa}-\boldsymbol{l_{ik}})!\,(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{s}-\boldsymbol{l_{sa}}-s)!}{(D-j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}$ [illegible] $) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ [illegible] $\wedge \boldsymbol{l_i}+$ [illegible] $-s=\boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+$ [illegible] $\leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 >$ [illegible] $\wedge \boldsymbol{l_{sa}}+$ [illegible] $-j_{sa} \leq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}})\big) \wedge$

$D \geq$ [illegible] $< n \wedge I = \mathbb{k} >$ [illegible] $\wedge$

$j_{sa} \leq j_{sa}^{i}$ [illegible] $\wedge j_{sa}^{ik}=j_{sa}$ [illegible] $-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}:\{j$ [illegible] $\mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} =$ [illegible] $+\mathbb{k} \wedge$

[illegible] $\wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+\boldsymbol{n}-D)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 -)!} \cdot$$

$$\frac{1}{(\boldsymbol{n} + 2\cdot j^{sa} + \quad j_{sa} \quad 2\cdot j_{ik} \quad - 2\cdot j_{sa})!} \cdot$$

$$\frac{(\quad - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{} - j_{ik} - \right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + \quad \boldsymbol{n} - \boldsymbol{l_i} - j_{})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\left((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \quad + 1 \wedge\right.$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > \quad - \boldsymbol{n} +$$

$$j_{sa}^{ik} + 1 \quad j_{ik} \leq j^{sa} + j_{} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa} \quad j^{sa} \quad + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$$

$$(D \geq \boldsymbol{n} < \quad \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$$

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$$j_{sa}^{ik}+1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le \boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\big)\wedge$$

$$D\ge\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$$

$$j_{sa}\le j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$$

$$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$$

$$s\ge 5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$$

$$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$$

$$
{}_{fz}S_{j_{ik}\dots sa}=\sum_{\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{j_{ik}+\boldsymbol{n}-D}
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}-\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-1)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l}_{\quad}-\boldsymbol{l}-j_{sa})}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+\quad)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}\quad-\boldsymbol{l}_{\quad}-j_{sa})}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\quad)!\cdot(j^{sa}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(\quad+j_{sa}-\quad-s)!}{(\quad+j^{sa}-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}\quad_{a}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{\quad}-\boldsymbol{l})} \sum_{(j_{ik}-\quad+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

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$j_{sa}^{ik}+1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le \boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\ge\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\le j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\ge 5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}^{\boldsymbol{l_s}+j_{sa}-D-1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_2-j_{ik}+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum^{(\ )}_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right.}$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-j^{sa}\quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \quad+j_{sa}-s>$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-$ $\wedge j_{sa}^{s}<j_{sa}^{ik}-$

$\boldsymbol{s}: \{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}$

$s \geq 5 \wedge \boldsymbol{s}=$ $+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\ \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}$$

$$\sum_{n_{ik}=n_{is}+}$$

$$\frac{\left(n_i+2\cdot j^{sa}+\right.}{\left(\right.}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+\right.}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}$ $\wedge\boldsymbol{l_s}>D-$ $+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}$ $j^{sa}+$ $-j_{sa}\wedge$

j_{ik} j_{sa} $j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+$ $>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - \quad !}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \quad _1 + 1)!}
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - \quad)!} \cdot
$$

$$
\frac{(n_{sa} - \quad)!}{(n_{sa} - j^{sa} \quad 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - \quad - \boldsymbol{l} + 1 \quad (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} \quad \boldsymbol{l_{sa}} - s)!}{(D + j \quad \boldsymbol{n} - \boldsymbol{l_{sa}}) \quad (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

$$
\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},\ldots} = \sum_{k=\boldsymbol{l}}^{\ldots} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}-\ldots-D-s)}^{\ldots} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\ldots}$$

$$\sum_{\ldots=\boldsymbol{n}+\mathbb{k}}^{\ldots} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_{i\ldots}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{\ldots} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\ldots}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - \cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s} - 1)!}{\left(\boldsymbol{l_s} + j_{ik} - j_{ik} - \boldsymbol{l}\right)!\,(j_{ik} - j_{sa}^{ik} - 1)!}\cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D - j^{sa} + s - \boldsymbol{l_i} - j_{sa})!\cdot(\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge \mathbb{k} > \mathbb{k} \wedge$

$j_{sa}^{s} \geq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\boldsymbol{l})!}{(j_{ik}+\boldsymbol{l}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ \ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=}^{(n_i}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{(\ \ )} \sum_{-n_{ik}}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + \quad s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \quad > D - \quad + 1 \wedge$

$j_{sa}^{ik} + \quad \leq j_{ik} \leq j^{sa} + \quad - j_{sa} \wedge$

$j_{ik} + j_{sa} - \quad \leq j^{sa} \leq \quad + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - \quad + 1 = \boldsymbol{l_s} - \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < \quad \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$\quad + 1 \quad \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\right.}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D}\sum_{j^{sa}=j_{ik}+j_{sa}-j_s}$$

$$\sum_{n_i+\mathbb{k}}^{(j_s+1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{n_{is}+j_{sa}^{s}-j_{sa}^{ik}}^{(\quad)}\sum_{\mathbb{k}_1}^{(\quad)}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+2\cdot j^{sa}+\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\quad 2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D > \quad m \wedge \boldsymbol{l} \neq \quad \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq \quad + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} \quad - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-} \sum_{j^{sa}=j_{sa}+1}^{}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-}^{(n_i-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}^{}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\ \sum_{(j_{ik}=j^{sa}\ldots-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\ \sum_{j^{sa}=j_{sa}\ldots}$$

$$\sum_{\ldots-j_s+1)}$$

$$\sum_{n_{i\ldots}+\mathbb{k}\,(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{\ldots n_{is}+j_{sa}^{s}-j_{sa}^{ik}\ldots\mathbb{k}_1}^{(\ )}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\ldots n_i+2\cdot j^{sa}+\ldots\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{\ldots n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\ldots 2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \ldots \boldsymbol{n} \wedge \boldsymbol{l} \neq \ldots \boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq \ldots + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} \ldots - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ \ )} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik})}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=j_{sa}+2}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\left. \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot \right.
$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \qquad \sum^{\boldsymbol{l_{sa}} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \qquad \sum^{(n_i - j_{ik}} \qquad \sum^{n_{ik} + j_{ik}} \qquad - \mathbb{k}_2$$

$$\frac{(n_i \qquad n_{ik} -}{(j_{ik} \quad 2)! \cdot (n_i \quad n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{\quad - n_{sa} \quad 1)!}{sa} \cdot$$

$$\frac{(n_{sa} - 1)!}{j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{k + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{(\quad)} \qquad \sum_{j^{sa} = j_{sa} + 1}^{\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \qquad \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{s} - j_{sa}^{ik} - \mathbb{k}_1} \qquad \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)}$$

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$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1$ $_{sa}$ $^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots{}_{a}^{i}\right\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z\geq 2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{\,j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\left.\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\right)\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=j_{sa}+2}^{\boldsymbol{l_s}+j_{sa}} \right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} +1$$

$$\frac{(n_i - n_{ik} - \quad - 1)!}{(j_{ik} - \quad - n_{ik} - \quad - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (\quad + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} \quad 1)!}{(n_{sa} + \quad - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{+ \boldsymbol{l} \quad - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{-}-s)!}\Bigg)\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{\left(j_{ik}=j_{sa}^{ik}+\right.}\sum_{^{sa}=j_{ik}+j_{sa}-j_{sa}^{}}$$

$$\sum_{n_i}\sum_{\mathbb{k}\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(\quad j_s+1)}$$

$$\sum_{n_{i}}\sum_{\mathbb{k}_1}^{(\quad)}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+\right.j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\ \boldsymbol{n}\ \ a\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq\ ^{a}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{s}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}} \sum_{} \quad \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\left. \frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \right.
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{\left(j_{ik}=j_{sa}^{ik}+1\right)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum^{(n_i-}_{(n_{is}=}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{(\ )}\sum_{}^{}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\quad s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\quad\boldsymbol{l}\wedge\boldsymbol{l_s}\quad D-\boldsymbol{n}\quad\wedge$

$j_{sa}^{ik}\quad\leq j^{sa}+j_{sa}^{ik}\quad j_{sa}-1\wedge$

$j_{ik}+j_{sa}\quad j_{sa}^{ik}+1\leq j^{s}\quad\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}\quad j_{sa}^{ik}+1=\boldsymbol{l_s}\quad\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge$

$>\boldsymbol{n}\quad\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{l_{sa}} - s)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\left. \frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot \right.
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{}\sum_{j^{sa}=}^{}$$

$$\sum_{n}^{n}\sum_{+\mathbb{k}}^{(n_i-}$$

$$\sum_{n_{il}=n_{is}+j_{sa}^{s}}^{(\ )}\sum_{-\mathbb{k}_1}^{}\sum_{-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\quad s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\quad\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}\quad1\wedge$

$j_{sa}^{ik}\leq\quad\leq j^{sa}+j_{sa}^{ik}\quad j_{sa}\wedge$

$j_{ik}+j_{sa}-\quad^{ik}\leq j^{sa}\leq\quad+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}\quad+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$\boldsymbol{l_{sa}}\leq D+\quad-\boldsymbol{n}\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$\quad\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - \quad}{(j_{ik}-2)! \cdot (n_i - n_{\quad} - j_{ik} - \quad_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - \quad_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} \quad j_{ik} - n_{sa} - \quad)!} \cdot
$$

$$
\frac{(n_{sa} - \quad)!}{(n_{sa} \quad {}^{sa} \quad 1)! \quad \boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} \quad \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{\quad} - \boldsymbol{l} + 1)! \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} \quad \boldsymbol{l_{ik}} - j_{sa}\right)!}{(\quad \boldsymbol{l_{sa}} - \quad_{sa} - \boldsymbol{l_{ik}})! \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{\quad} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

$$
\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2$

$$j^{\{j_{ik},j^{sa}\}} \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D} \right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(j_{ik} + j^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + j^{sa} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)}$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\ \sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik}+1}\ \sum_{\boldsymbol{l}+\boldsymbol{n}+j_{sa}-D-s}$$

$$(n_i-j_s+$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}\ \sum_{(n_{is}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+\ j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(\ -\boldsymbol{n}-\mathbb{k}_{\ }+\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+\ j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\geq \boldsymbol{n}<\ \wedge \boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\ \leq D-\boldsymbol{n}+1\wedge$$

$$D+\boldsymbol{l}_{\ }+j_{sa}-\ \boldsymbol{sa}-j_{sa}^{ik}+2\leq\boldsymbol{l}\leq\ _{\boldsymbol{i}}\boldsymbol{l}-1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq\ ^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$$

$$+j_{s}\ ^{ik}_{sa}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$$

$$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik}\wedge$$

$$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$$

$$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{=\boldsymbol{n}}^{n_{ik}-j^{sa}-\mathbb{k}_2} {}^{sa}+1
$$

$$
\frac{(n_i - n_{i} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{i} - j_{ik} - \mathbb{k}_1 +)!} \cdot
$$

$$
\frac{ik}{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa})!} \cdot
$$

$$
\frac{(-1)!}{(n_{sa} - j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(-\boldsymbol{l} - j_{sa}^{ik})!}{(-j_{} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

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$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_i}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots_{sa}\right\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=$ $+\mathbb{k}_2\Rightarrow$

$$S_{j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\right.$$

$$\left.\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\right)$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(\boldsymbol{l} + j^{sa} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)\cdot$$

$$\sum_{k=\boldsymbol{l}}^{\quad}\sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{(\ )}\sum_{\left(\boldsymbol{l_i}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-\right.}^{\quad}$$

$$\sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{\quad}$$

$$\sum_{n_i}^{\quad}\sum_{\left(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)}^{(\ )}$$

$$\frac{n_i+2\cdot j^{sa}+\quad j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{\quad_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\quad 2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\ \boldsymbol{l}\ \boldsymbol{n}\wedge\boldsymbol{l}\neq\ _i\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_{ik}}+\ \ -\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+2\leq\boldsymbol{l}\leq\ _i\boldsymbol{l}-1\wedge$

$j_{sa}-j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik}\wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=\boldsymbol{l_{sa}}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_{ik}+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{j^{sa}=\boldsymbol{n}-j^{sa}+1}^{\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_2)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right.} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - \wedge j_{sa}^{s} < j_{sa}^{ik} - \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\}$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z.z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$_{fz}S_{j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} + 1)} \sum_{(j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa})} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \right.$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\left. \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \right.$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=\boldsymbol{l}+\boldsymbol{n}-D}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right)}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\quad-j_{sa}\right)!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\quad+j_{sa}-j^{sa}\quad)!}\Bigg)-$$

$$\sum_{(j_{ik}=\boldsymbol{l_i}+}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{\quad-D-s)}^{\quad}\quad{}_{sa}-j_{sa}^{ik}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{\quad}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+\quad{}^{sa}+2\quad{}_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\boldsymbol{n}>\boldsymbol{n}<\quad\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{} \sum_{(j_{ik}=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\left. \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \right.
$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\ \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-j_{sa})}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}_{ik}-j_{ik}+1)}^{n_i-j_{ik}-\mathbb{k}_1+1}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-1)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\ \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1)}^{(\ )}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - \quad \cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s} - \quad - 1)!}{\left(\boldsymbol{l_s} + \quad j_{ik} - \boldsymbol{l}\right)! \quad j_{sa}^{ik} - 1)!}\cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D \quad ^{sa} + s - \quad \boldsymbol{l_i} - j_{sa} \quad \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _i\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} \quad _{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} \quad _{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \quad > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - \quad j_{sa}^{ik} = j_{sa} \quad - 1 \wedge j_{sa}^{s} < j_{sa}^{i} \quad 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \quad j_{sa}, \cdots j_{sa}^{i} \quad \} \wedge$

$s \geq 5 \wedge \quad = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \quad = \mathbb{k}_1 + \quad \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)!\cdot(n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right)}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-{}^{sa}-s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l}_s+j_{sa}^{ik}} \sum_{(j_{ik}=j_{sa}^{ik}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_s}$$

$$-j_s+1)$$

$$\sum_{+\mathbb{k}\,(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}\ \mathbb{k}_1} \sum^{(\ )}_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{n_i+2\cdot j^{sa}+\cdot j_{sa}^{ik}-\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\boldsymbol{n}\ 2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \quad n \wedge \boldsymbol{l} \neq \quad \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq \quad + j_{sa}^{ik}-j_{sa} \wedge$

$\quad - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \leq D+j_{sa}^{ik}-\boldsymbol{n} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l} - j_{sa} + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} + 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}
$$

$$
\sum_{n_{ik} = n_{is} + j_{sa}^{s} - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

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$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1)\vee$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\Big)$$

$$D\geq\boldsymbol{n}<n\wedge I=\ldots>0\wedge$$

$$j_{sa}^{s}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}^{s}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$$

$$\boldsymbol{s}:\{\mathbb{k}_{z},\cdots,\mathbb{k}_{1},j_{sa}^{ik},\mathbb{k}_{1},\ldots,j_{sa},\cdots,j_{sa}\}$$

$$s\geq 5\wedge\ldots=s+\mathbb{k}\wedge$$

$$\mathbb{k}_{z}\colon z=2\wedge\mathbb{k}_{z}=\mathbb{k}_{1}+\mathbb{k}_{2}\Rightarrow$$

$${}_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-s+1}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}-\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_2+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-1)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\boldsymbol{\cdot}\ j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{\left(\boldsymbol{l_s}+j_{ik}-j_{ik}-\boldsymbol{l}\right)!\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j^{sa}+s-\boldsymbol{l_s}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}\ {}_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}\ {}_{a}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l}\ j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq\ +\boldsymbol{l_s}+s-\boldsymbol{n}-\ )\vee$$

$$(\ \geq\boldsymbol{n}<n\wedge\ \neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\ \leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\ j_{ik}\leq j^{sa}+j_{s}\ -j_{sa}\wedge$$

$$j_{ik}+j_{sa}\ j_{sa}^{ik}\leq j^{sa}\leq\ +j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1\ \boldsymbol{l}\wedge\boldsymbol{l}\ +j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$D\ j_{sa}\ <\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\Big)\wedge$$

$$D\geq\boldsymbol{n}<\ \wedge I=\mathbb{k}>0\wedge$$

$$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$$

$$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$$

$$s\geq 5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$$

$$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\boldsymbol{l}+1)!}{(j_{ik}+\boldsymbol{n}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

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$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}}^{(n_i}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_2}^{(\ )}\sum_{=n_{ik}}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\boldsymbol{n}+j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\quad s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\quad\boldsymbol{l}\wedge\boldsymbol{l_s}\quad D-\boldsymbol{n}\quad\wedge$

$j_{sa}^{ik}\quad\leq j^{sa}+j_{sa}^{ik}\quad j_{sa}\wedge$

$j_{ik}+j_{sa}\quad\leq j^{sa}\leq\quad+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}\quad+1=\quad\boldsymbol{sa}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}-\quad\leq\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1\wedge$

$\quad>\boldsymbol{n}<\quad\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s\geq5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\boldsymbol{l})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

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$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\quad -j_{ik})}^{(n_i\quad +1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}\quad =n_{ik}}^{(\ )}\quad -j^{sa}-\mathbb{k}_2)$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\boldsymbol{n}+\quad j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\quad -\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\quad\boldsymbol{l}\wedge\boldsymbol{l_s}\quad D-\boldsymbol{n}\quad\wedge$

$j_{sa}^{ik}\quad\leq j^{sa}+j_{sa}^{ik}\quad j_{sa}\wedge$

$j_{ik}+j_{sa}\quad\leq j^{sa}\leq\quad+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}\quad+1=\quad\boldsymbol{sa}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}-\quad\leq\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1\wedge$

$\quad>\boldsymbol{n}<\quad\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s\geq5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\boldsymbol{l})!}{(j_{ik}+\boldsymbol{n}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=}^{(n_i}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{(\ )}\sum_{}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+j^{sa}+2\cdot j^{}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\quad s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\quad\boldsymbol{l}\wedge\boldsymbol{l_s}\quad D-\boldsymbol{n}\quad\wedge$

$j_{sa}^{ik}\leq\quad\leq j^{sa}+j_{sa}^{ik}\quad j_{sa}\wedge$

$j_{ik}+j_{sa}-\quad^{ik}\leq j^{sa}\leq\quad+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-\quad+1=\boldsymbol{l_s}-\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{l_i}\leq D+s\quad\boldsymbol{n}\wedge$

$\quad\boldsymbol{n}\quad\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - \quad)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \quad_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - \quad_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} \quad j_{ik} - n_{sa} - \quad)!} \cdot
$$

$$
\frac{(n_{sa} - \quad)!}{(n_{sa} \quad j^{sa} \quad 1)! \quad \boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} \quad \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - \quad \boldsymbol{l} + 1) \quad (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} \quad \boldsymbol{l_{sa}} - s)!}{(D + j^{\quad} \quad \boldsymbol{n} - \boldsymbol{l_{sa}}) \quad (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

$$
\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_{sa}}+s-\boldsymbol{n}-j_{sa} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}<j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z\colon z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$S_{j_{ik},j^{sa}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\quad\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\quad-1)!}{\left(\boldsymbol{l_s}+\quad j_{ik}-\boldsymbol{l}\right)!\quad j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j^{sa}+s-\boldsymbol{l_i}-j_{sa}^{ik})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}-\ _{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-\ _{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l}-j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge \mathbb{k} = \mathbb{k} > \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}-\ _{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{s}\cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = \ +\mathbb{k} \wedge$

$\mathbb{k}_{\ } \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}})!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{j_{sa}=j_{sa}^{ik}+1}^{j_{sa}-j_{sa}^{ik}}$$

$$\sum_{i_s=\boldsymbol{n}+\mathbb{k}}^{(n_i - j_s + 1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{j_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + \quad j^{sa} + 2 \quad {}_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < \quad \wedge \boldsymbol{l} \neq \quad {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{+\mathbb{k}_2-j_{ik}+1)} \sum_{a}=\boldsymbol{n}-j^{sa}+1
$$

$$
\frac{(n_i - n_{ik}}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{ - n_{sa} - 1)!}{{}^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{ - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

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$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{i}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

fz[illegible] $=\sum_{k=\boldsymbol{l}}\ \sum_{\left(j_{ik}=j_{sa}^{ik}+1\right)}^{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1\right)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}} \sum_{n_{sa}=n_{ik}+j_{ik}-\mathbb{k}_2)}^{(}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot \quad - s - 2 \cdot \quad - \mathbb{k}_1 - \mathbb{k}_2\right)}{(n_i - \boldsymbol{n} - \mathbb{k}_1 \quad)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} \quad 2 \cdot j_{sa}^{ik} - \quad j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j \quad - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\quad \boldsymbol{l_i})!}{(D + j^{sa} + \quad - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \quad _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \quad + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j \quad + j_{sa}^{ik} - \quad \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j \quad \leq \boldsymbol{n} + j \quad - \quad \wedge$

$\boldsymbol{l_{ik}} - j \quad + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s \quad) \vee$

$(D \quad \boldsymbol{n} \quad n \wedge \boldsymbol{l} \neq \quad _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq \quad a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})\,\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\sum_{j^{sa}=j_{sa}+1}^{l_{ik}-l_{sa}^{ik}+1}$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(\ )}$$

$$\sum_{n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{(n_i+2\cdot j^{sa}+\cdots-j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(\cdots-\boldsymbol{n}_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\cdots+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \boldsymbol{l_i} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D+s-\boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \boldsymbol{l_i} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

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$$j_{sa}^{ik} \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$$

$$\boldsymbol{l_i} \le D + s - \boldsymbol{n}\big) \wedge$$

$$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$
{}_{fz}S_{j_{ik},} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{-\boldsymbol{l}+1}
$$

$$
\sum_{n_{}}^{n} \sum_{+\mathbb{k}\,(n_{ik}=\boldsymbol{n}}^{(n_{} - j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{a} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - \quad \cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s} - \quad - 1)!}{\left(\boldsymbol{l_s} + \quad j_{ik} - \boldsymbol{l}\right)!\ \quad - j_{sa}^{ik} - 1)!}\cdot$$

$$\frac{(D - \quad \boldsymbol{l_i})!}{(D - \quad ^{sa} + s - \quad \boldsymbol{l_i} - j_{sa} \quad \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + \quad \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} \quad _{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} \quad _{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq \quad + \boldsymbol{l_s} + s - \boldsymbol{n} - \quad) \vee$

$(\quad \geq \boldsymbol{n} < n \wedge \quad \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \quad \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \quad j_{ik} \leq j^{sa} + j_{s} \quad - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad j_{sa}^{ik} \leq j^{sa} \leq \quad + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \quad \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \quad j_{sa} \quad < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < \quad \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})\,\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ \ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=}^{(n_i}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{(\ \ )} \sum_{-n_{ik}}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + \quad s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \quad _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} < D - \quad + 1 \wedge$

$j_{sa}^{ik} \leq \quad \leq j^{sa} + j_{sa}^{ik} \quad _{sa} \wedge$

$j_{ik} + j_{sa} - \quad \leq j^{sa} \leq \quad + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} \quad _s + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} \quad \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1) \vee$

$(\quad < n \wedge \boldsymbol{l} \neq \quad _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

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$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{\cdots})}^{\boldsymbol{l_s}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}^{\cdots}}^{\cdots D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\cdots-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} \cdots n_{sa} - 1)!}{(j^{sa} \cdots - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right)} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - \right. - j_{sa})!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} -}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \quad + j_{sa} - j^{sa} -)!} -$$

$$\sum_{(j_{ik}=\boldsymbol{l_i}+}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{-D-s)} \sum_{a}^{} - j_{sa}^{ik}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{k=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i + \ldots j^{sa} + 2 \ldots {}_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\left(D > \boldsymbol{n} \ldots n \wedge \boldsymbol{l} \neq \ {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge\right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$$

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$\boldsymbol{l_i} \le D + s - \boldsymbol{n}) \vee$

$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l} \ne \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \le D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_{sa}} \le D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \le D + s - \boldsymbol{n})\big) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{\cdots}{}_{\cdots}{}^{sa} = \sum_{k=\boldsymbol{l}}^{\cdots} \sum_{(j_{\cdots}{}^{ik}_{sa}+1)}^{\cdots} \sum_{j^{sa}=j_{sa}+1}^{j_{sa}+j_{sa}^{ik}-j_{s\cdots}{}^{\cdots}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(\quad - 1)!}{(n_{\quad} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}}}{(\quad - j_{ik} - \quad + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + \quad - \boldsymbol{l_{ik}} - \quad)!}{(j_{ik} + \quad - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{s} - \boldsymbol{l_{sa}} - s)!}{(D - j^{sa} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},\ldots} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}\ldots} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\right.
$$

$$
\sum_{=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_{i}\ldots-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)!\cdot(n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}\cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)!\cdot(n_{ik} + j_{ik} - n_{sa} - j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)!\cdot(\boldsymbol{n} - j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)!\cdot\left(j_{ik} - j_{sa}^{ik} - 1\right)!}\cdot
$$

$$
\left.\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})!\cdot(\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=j_{sa}+2}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\right.
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{ik}}-1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\ \ )!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+\ \ j_{sa}-2\cdot j_{ik}-\ \ -2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\ \ -\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{}^{}-j_{ik}-\ \ \right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+\ \ \boldsymbol{n}-\boldsymbol{l_i}-j_{}^{})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ \ \boldsymbol{l} \wedge \boldsymbol{l_{s}} \ \ D+j_{sa}-\boldsymbol{n}$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-$

$j_{ik}+j_{sa}-j_{sa}^{ik}+ \ \ j^{sa} \leq \boldsymbol{n}+j_{sa} \ \ \wedge$

$\boldsymbol{l}_{}-j_{sa}^{ik}+ \ \ \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} \ \ j_{sa}^{ik}-j_{sa} \geqslant \boldsymbol{l_{ik}} \wedge$

$D \geqslant \boldsymbol{n} < n \wedge I = \ \ 0 \wedge$

$j_{sa} \leq j_{sa} \ \ 1 \wedge j_{sa}^{ik} = j_{s} \ \ 1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, \ \ \mathbb{k}_2, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ \ s \wedge \ \ s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \ \ \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\right.$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{i}^{}}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right.}{(n_i-\boldsymbol{n}-\mathbb{k}_1-$$

$$\frac{1}{(+2\cdot j^{sa}+$$

$$\frac{(}{(\boldsymbol{l_s}+j_{s}^{}-j_{ik}-\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-$$

$$\left((D\geq \boldsymbol{n}<n\wedge \boldsymbol{l}\neq {}_{\boldsymbol{i}}\boldsymbol{l}\wedge \leq D-\boldsymbol{n}+1\wedge\right.$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+\boldsymbol{l_{sa}}-j_{sa}^{ik}\leq j^{s}\leq \boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\wedge \boldsymbol{l_{sa}}+-j_{sa}>\boldsymbol{l_{ik}}\wedge$$

$$\boldsymbol{l_i}\leq +s-\boldsymbol{n})\vee$$

$$(D\geq \boldsymbol{n}<\wedge \boldsymbol{l}\neq {}_{\boldsymbol{i}}\boldsymbol{l}\wedge \leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq \leq j^{sa}\quad j_{sa}\wedge$$

$$j_{ik}+j_{sa}-\leq j^{sa}\leq \boldsymbol{n}+j_{sa}-s\wedge$$

$$-j\quad 1>\boldsymbol{l_s}\wedge$$

$$\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge \boldsymbol{l_i}\leq D+s-\boldsymbol{n})\big)\wedge$$

$$D\geq \boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$$

$$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{s}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}}^{n_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{i} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{i} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(j_{ik} - 1)}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} - j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(j_{sa}^{ik} - \boldsymbol{l} - j_{sa}^{ik})!}{(j_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

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$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_i}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots_{sa}\right\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=$ $+\mathbb{k}_2\Rightarrow$

$$f_{j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\left.\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\right)\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(\boldsymbol{l} + j^{sa} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)\cdot$$

$$\sum_{k=\boldsymbol{l}}^{\quad}\ \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ \ )}\ \sum_{=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-}$$

$$\sum_{(j_s+1)}$$

$$\sum_{+\mathbb{k}\,(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{m_{is}+j_{sa}^{s}-j_{s}^{ik}\ \mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{n_i+2\cdot j^{sa}+\ j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{{}_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\ \boldsymbol{l}\ \boldsymbol{n}\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D\ \boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$

$j_{sa}\ j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik}\wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-\cdots)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=j_{ik}\cdots-j_{sa}^{ik}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}\cdots+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}\cdots-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik}}{(j_{ik} \cdots 2)! \cdot (n_i - n_{ik} - j_{ik} \cdots \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{\cdots_{ik} - n_{sa} \cdots 1)!}{\cdots^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{\cdots j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\left. \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \right) \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{\left(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}\right)}^{-\boldsymbol{l}+}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+}$$

$$\sum_{n_i=\boldsymbol{n}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}}^{+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(\quad-n_{ik}-\quad-1)!}{(j_{ik}-2)!\cdot(\quad-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{i}\quad n_{sa}-1)!}{^{sa}-j_{ik}\quad\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa}\right)!}$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)!\cdot\left(j_{ik} - j_{sa}^{ik} - 1\right)!}\cdot$$

$$\frac{(D - \boldsymbol{l_i}}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})!\cdot(\quad + j_{sa} - j^{sa}\quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \quad + j_{sa} - s = \quad \wedge$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l} \quad j_{sa}^{ik} - \boldsymbol{n} \quad 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa} < j_{sa}^{ik} - 1$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \ldots, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \quad \wedge$

$\mathbb{k}_z: z \quad 2 \wedge \mathbb{k} = \mathbb{k}_1 + \quad \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)!\cdot(n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!}\cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)!\cdot(n_{ik} + j_{ik} - n_{sa} - j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}$$

$$\sum_{n_{ik}=n_{is}+}$$

$$\frac{\left(n_i+2\cdot j^{sa}+\right.\cdot j_{sa}^{ik}-2\cdot j_{ik}\ s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{-\boldsymbol{n}-\mathbb{k}_1\ \mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+\ \cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}\ \wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\ \leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j\ \ j_{sa}^{ik}\wedge$

$j_{ik}+j_{sa}\ \ j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\ >\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}}^{n_{ik}+j_{ik}-j^{sa}-}
$$

$$
\frac{(n_i - n_{ik}^{\mathbb{k}_1} - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik}^{\mathbb{k}_1} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa}^{} - 1)!}{(j^{sa} - j_{ik}^{} - 1)! \cdot (n_{ik} + j_{ik}^{} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa}^{} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l}^{} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik}^{} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j^{} - \boldsymbol{l_{sa}} - s)!}{(D^{j^{sa}} - \boldsymbol{n}^{} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

$$
\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$\boldsymbol{s}_{j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+j_{sa}^{ik}-s+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\quad\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\quad-1)!}{\left(\boldsymbol{l_s}+\quad j_{ik}-\boldsymbol{l}\right)!\,(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j^{sa}+s-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \quad_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}-j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l}-j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_s} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \quad = \mathbb{k} > \quad \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa} \quad j_{sa}-\quad j_{sa}^{s} \quad j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \quad \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{s} \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = \quad + \mathbb{k} \wedge$

$\mathbb{k} \quad \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l}} \sum_{(j_{ik} = \boldsymbol{n} - D)}^{\boldsymbol{l_i} + j_{sa} - 1} \sum_{j^{sa} = j_{ik} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 2}^{}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(\mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j \quad \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{ik} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{\boldsymbol{l_s} + j_{sa} - \boldsymbol{l}} \sum_{j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D}^{}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\quad\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\quad-1)!}{\left(\boldsymbol{l_s}+\quad j_{ik}-\boldsymbol{l}\right)!\quad j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j^{sa}+s-\boldsymbol{l_i}-j_{sa}\quad\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}\ _{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}\ _{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l}\ -j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_s}\ \leq D+\boldsymbol{l_s}+j_{sa}\ \boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n\ = \mathbb{k} > \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}\ -j_{sa}-\ j_{sa}^{s}\ j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}\ \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{s}\ \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} =\ +\mathbb{k} \wedge$

$\mathbb{k}\ \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{n} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-D-j_{sa})}^{(\boldsymbol{l_{ik}}-1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{l_i+j_{sa}^{ik}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(j_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - \quad \cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s} - \quad - 1)!}{\left(\boldsymbol{l_s} + \quad j_{ik} - \boldsymbol{l}\right)! \quad - j_{sa}^{ik} - 1)!}\cdot$$

$$\frac{(D \quad \boldsymbol{l_i})!}{(D \quad ^{sa} + s - \quad \boldsymbol{l_i} - j_{sa} \quad \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + \quad \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} \quad _{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} \quad _{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l} \quad j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \quad \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \quad \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \quad j_{ik} \leq j^{sa} + j_{s} \quad - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad j_{sa}^{ik} \leq j^{sa} \leq \quad + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \quad \boldsymbol{l} \wedge \boldsymbol{l} \quad + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \leq D + \quad ^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n}\Big) \wedge$

$\quad \geq \boldsymbol{n} < \quad \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{sa}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(\quad-1)!}{(n_{\quad}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa}}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}}{(\quad-j_{ik}-\quad+1)!\cdot(j_{ik}-j_{sa}-1)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=j_{sa}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot
$$

$$
\frac{1}{(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}
$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\boldsymbol{\cdot}\ j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{\left(\boldsymbol{l_s}+j_{ik}-j_{ik}-\boldsymbol{l}\right)!\,(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j^{sa}+s-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D\geq \boldsymbol{n}<n\wedge \boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge \boldsymbol{l_s}\leq D-\boldsymbol{n}+\ \wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq \boldsymbol{n}\ _{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}\ _{a}=\boldsymbol{l_{ik}}\wedge$

$D+j^{ik}-\boldsymbol{n}<\boldsymbol{l_{ik}}\ D+\boldsymbol{l_s}+j_{sa}^{ik}\ -1\Big)$

$(\ \geq \boldsymbol{n}<n\wedge\ \neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\ \leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\ j_{ik}\leq j^{sa}+j_{s}\ -j_{sa}\wedge$

$\ _{k}+j_{sa}\ j_{sa}^{ik}\leq j^{sa}\leq\ +j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1\ \wedge\ +j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\ j_{sa}\ <\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\Big)\wedge$

$D\geq \boldsymbol{n}<\ \wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 5\wedge \boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(\quad-1)!}{(n_{\quad}+j^{sa}-\boldsymbol{n}\quad)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\quad)!}{(\boldsymbol{l}_{\quad}-j_{ik}-\quad)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(D+\quad-\boldsymbol{l_{sa}}\quad)!}{(D\quad-j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}\quad)!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l}_s+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}
$$

$$
\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot
$$

$$
\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}
$$

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$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \boldsymbol{l_i} + j_{sa} - s \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(j_{ik} = j_{sa}^{[illegible]}} \sum_{j^{sa} = \boldsymbol{l_s} + [illegible] - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{[illegible] - j_{ik} + 1)}^{(n_i - j_{ik} - [illegible] + 1)} \sum_{j^{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - [illegible] \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 [illegible]}{(j_{ik} - [illegible])! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{([illegible] - n_{sa} - 1)!}{[illegible] - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{([illegible] + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{[illegible]_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1} \sum_{j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{s} - j_{sa}^{ik} - \mathbb{k}_1}^{(\ \ )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

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$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D\geq \boldsymbol{n}<n\wedge \boldsymbol{l}\neq {}_{\boldsymbol{i}}\boldsymbol{l}\wedge \boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq \boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik}\wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_{sa}}+s-\boldsymbol{n}-j_{sa}\Big)\wedge$

$(D\geq \boldsymbol{n}<n\wedge \boldsymbol{l}\neq {}_{\boldsymbol{i}}\boldsymbol{l}\wedge \boldsymbol{l_s}\leq -\boldsymbol{n}+$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq {}^{sa}\leq \boldsymbol{n}+j_{sa}-$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+=\boldsymbol{l_s}\wedge \boldsymbol{l}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l}\leq D+\boldsymbol{l}-j_{sa}-\boldsymbol{n}-1)\Big)\wedge$

$D\geq <n\wedge I=\mathbb{k}>\wedge$

$j_{sa}\leq j_{sa}^{i}-\wedge j_{sa}^{ik}=j-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s\geq 5\wedge \boldsymbol{s}\neq +\mathbb{k}\wedge$

$\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{\boldsymbol{l}=1}^{(\boldsymbol{l_s}+j_{sa}^{ik})} \sum_{(j_{ik}=\boldsymbol{l_{sa}}-\boldsymbol{l}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{}^{}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\ \ )!}\cdot$$

$$\frac{1}{(n+2\cdot j^{sa}+\ \ _{sa}-2\cdot j_{ik}-\ \ -2\cdot j_{sa})!}\cdot$$

$$\frac{(\ \ -\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{}^{}-j_{ik}-\ \ \right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\ \ \boldsymbol{l_i})!}{(D+j^{sa}+\ \ \boldsymbol{n}-\boldsymbol{l_i}-j_{}^{}\ \ )!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((D\geq \boldsymbol{n}<n\wedge \boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\ \ \leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+\ \ -j_{sa}^{ik}\leq j^{\ \ }\leq \boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\ \ \wedge \boldsymbol{l_{sa}}+\ \ -j_{sa}>\boldsymbol{l_{ik}}\wedge$$

$$D+\ \ -\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+\ \ -\boldsymbol{n}-1)\vee$$

$$(D\geq \boldsymbol{n}\ \ \wedge \boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\ \ \leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq\ \ \leq j^{sa}\ \ \ \ j_{sa}\wedge$$

$$j_{ik}+j_{sa}-\ \ ^{ik}\leq j^{sa}\leq \boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l}_{}-j_{s}\ \ 1>\boldsymbol{l_s}\wedge$$

$$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1\wedge$$

$$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_{sa}}+s-\boldsymbol{n}-j_{sa})\vee$$

$$(D\geq \boldsymbol{n}<n\wedge \boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge \boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \le D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l} \ne {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \le D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \le D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\sum_{j_{ik}, j^{sa}} \sum_{k=(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(\quad-1)!}{(n_{\quad}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{s}}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}\quad\quad^{ik}_{sa})}{(\quad-j_{ik}-\quad+1)!\cdot(j_{ik}-\quad a-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+\quad^{ik}-\boldsymbol{l_{ik}}\quad_{a})!}{(j_{ik}+\quad-j^{sa}-\boldsymbol{l_{ik}})!\,(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{s}-\boldsymbol{l_{sa}}-s)!}{(D\quad-j^{sa}-\quad\boldsymbol{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

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$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa})$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} -$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n}$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l}$ ${}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D -$ $1 \wedge$

$j_{sa}^{ik} \leq$ $\leq j^{sa} + j_{sa}^{ik}$ $\wedge$

$j_{ik} + j_{sa} -$ $\leq j^{sa} \leq$ $+ j_{sa} - s \wedge$

$\boldsymbol{l_{ik}}$ $+ 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} -$ $< \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

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$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=}^{(n_i}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{}$$

$$\frac{(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2}) \cdot$$

$$\frac{1}{(\boldsymbol{n} + j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} - s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1\big) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

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$$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \le D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$$

$$D + s - \boldsymbol{n} < \boldsymbol{l_i} \le D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$$

$$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l} \ne \ {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \le D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \le D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$$

$$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{j_z \supset j_{ik}, j} \sum_{\boldsymbol{l}=(j_{ik}=j-j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-i}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{i}}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{s}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+\ j_{sa}-2\cdot j_{ik}-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{-}-j_{ik}-\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+\boldsymbol{n}-\boldsymbol{l_i}-j_{}-)!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{s}}$ $D+j_{sa}-\boldsymbol{n}$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-$

$j_{ik}+j_{sa}-j_{sa}^{ik}+$ $j^{sa} \leq \boldsymbol{n}+j_{sa}$ $\wedge$

$\boldsymbol{l}$ $-j_{sa}^{ik}+1$ $\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}$ $j_{sa}^{ik}-j_{sa} \geqslant \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I =$ $0 \wedge$

j_{sa} $\leq j_{sa}$ $-1 \wedge j_{sa}^{ik} = j_{s}$ $-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, \mathbb{k}_2, \cdots, j_{sa}^{i}\} \wedge$

s $\leq s \wedge$ $s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2$ $\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}\right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{i_l}}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik})}^{\boldsymbol{l_{sa}}-\boldsymbol{i_l}+1} \sum_{j^{sa}=j_{sa}+1}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot(j^{sa}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{i_l}}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \leq D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_{sa}} = \sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{\boldsymbol{l_{sa}}-{}_{\boldsymbol{i}}\boldsymbol{l}+1} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\quad-2\cdot j_{sa}\right)}\cdot$$

$$\frac{(D-\boldsymbol{l_i}}{(D+s-\boldsymbol{n}\quad)!\ \boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{\quad}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\quad j_{sa}<j_{\quad}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots\right\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z\quad 2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{sa}}-\ _{i}\boldsymbol{l}+1}\sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_{ik}} - {}_{i}\boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - {}_{i}\boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} -$$

$$\sum_{k={}_{i}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(\ )}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} \quad _{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \quad > 0 \wedge$

$j_{sa}^{i} \leq j_{sa}^{i} - \quad j_{sa}^{ik} = j_{sa}^{s} - 1 \wedge j_{sa}^{s} < j_{sa}^{i} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \quad j_{sa}, \cdots, \quad\}$

$s \geq 5 \wedge \quad = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \quad \mathbb{k}_1 + \quad \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k={}_{i}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{ik}}+j_{sa}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-{}_{i}\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right.}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}-s)!}$$

$$\sum_{k=}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_i-j_{ik}-\mathbb{k}+1)\,n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\cdots-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}-2\cdot j^{sa}+2\cdot j_{sa}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}={}_{i}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}<j^{sa}\leq\cdots+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}-\cdots+j_{sa}^{ik}-\cdots=\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}-\cdots\wedge I=\mathbb{k}>\cdots\wedge$

$j_{sa}\leq j_{sa}^{i}-1\cdots^{ik}-\cdots-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa},\cdots,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s\geq 5\wedge\boldsymbol{s}\cdots s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$fzS_{j_{ik},j^{sa}}=\sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-{}_{i}\boldsymbol{l}-j_{sa}+1\right)}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\quad - j^{sa})!}$$

$$\frac{\left(\boldsymbol{l_{ik}} \quad \boldsymbol{l} - j_{sa}^{i}\right)}{\left(\boldsymbol{l_{ik}} - j_{ik} - \quad \boldsymbol{l} + \quad \cdot \left(j_{ik} - j_{sa}^{ik} \quad\right)!\right.} \cdot$$

$$\frac{j_{sa} - \boldsymbol{l}_{\boldsymbol{s}} - s)!}{(D + \quad - \boldsymbol{n}^{\quad} \quad - s)!} -$$

$$\sum_{k=\ \boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\quad \mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i + 2 \cdot j \quad + 2 \cdot j_{sa}^{ik} \quad \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(\quad \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2) \quad \left(\boldsymbol{n} \quad \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} \quad n \wedge \boldsymbol{l} = \quad \boldsymbol{l} \wedge \quad \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq \quad + j_{sa}^{ik} \quad a \wedge$

$j_{i} \quad j_{sa} \quad j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \quad > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \quad < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}} -\ _{\boldsymbol{i}}\boldsymbol{l}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - \boldsymbol{n} - 1)!}{(n_{sa} - j^{sa} - \boldsymbol{n})! \cdot (j^{sa} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D - j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} -
$$

$$
\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}
$$

$$
D \geq \boldsymbol{n} < \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge
$$

$$
j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge
$$

$$
j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge
$$

$$
\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge
$$

$$
\boldsymbol{l_{ik}} \leq D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge
$$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\ {}_{\boldsymbol{i}}\boldsymbol{l}}^{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\ {}_{\boldsymbol{i}}\boldsymbol{l}-j_{sa}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{} \sum_{} \sum_{} \sum_{} \frac{(n_i \quad n_{ik} - \mathbb{k}_1}{(j_{ik} \quad 2)! \cdot (n_i \quad n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \frac{(\quad - n_{sa} \quad 1)!}{(\quad a - j_{ik} - 1)! \quad n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot \frac{\left(\boldsymbol{l_{ik}} - \ {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \ {}_{\boldsymbol{i}}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} -
$$

$$
\sum_{k=\ {}_{\boldsymbol{i}}\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik})}^{(\ \ )} \sum_{j^{sa}=j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ \ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot \frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}
$$

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$$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$$

$$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$$

$$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n})\Big) \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{\cdot} - 1 \wedge$$

$$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{s}^{i}\}$$

$$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_{ik},j^{sa}} = \sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{sa}} - {}_{\boldsymbol{i}}\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{s}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=}^{j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{s} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\ )}{(D - s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{i}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \ \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} < \ + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - \ _{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \ > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - \ \ j_{sa}^{ik} = j_{s} - 1 \wedge j_{sa}^{s} < j_{sa}^{i} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \ j_{sa}, \cdots, \ \}$

$s \geq 5 \wedge \ = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \ = \mathbb{k}_1 + \ \Rightarrow$

$$_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{ik}}+j_{sa}-\ _{i}\boldsymbol{l}-j_{sa}^{ik}+1} \right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\left. \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \right) \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-{}_{i}\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right.}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(-s)!}\right)\cdot$$

$$\left(\sum_{k=\ {}_{i}\boldsymbol{l}}^{}\ \sum_{(j_{ik}=j_{sa}^{ik})}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\ \sum_{j^{sa}=j_{sa}+1}^{-{}_{i}\boldsymbol{l}-j_{sa}^{ik}+1}\right.$$

$$\sum_{n_i=\boldsymbol{n}+}^{n}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(-n_{ik}-1)!}{(j_{ik}-2)!\cdot(-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n-n_{sa}-1)!}{-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-{}_{i}\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}+1\right)}\ \sum_{(j_{ik}=j_{sa}^{ik})}^{}\ \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-{}_{i}\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j$$

$$\frac{\left(\boldsymbol{l_{ik}} - {}_{i}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{i}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (\quad + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + \quad - \boldsymbol{l_{sa}} - }{(D + j^{sa} - \boldsymbol{n} - \quad)! \cdot (\quad - j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\quad}^{(\quad)} \sum_{j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i + \mathbb{k}}^{n} \sum_{(n_{ik}=n_i - j_{ik} - \mathbb{k}_1 + 1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{- \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + \quad \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \quad < n \wedge \boldsymbol{l} = \quad {}_{\boldsymbol{i}}\boldsymbol{l} \quad \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \quad {}^{sa} + j_{sa}^{ik} - \quad - 1 \wedge$

$j_{ik} + \quad - j_{sa}^{ik} + \quad \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \quad > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\quad \boldsymbol{n} \quad \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}} -\ {}_{i}\boldsymbol{l}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - {}_{i}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{i}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D - j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} \right) +
$$

$$
\left(\sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}} -\ {}_{i}\boldsymbol{l}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}} -\ {}_{i}\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\left. \frac{\left(\boldsymbol{l_{ik}} - {}_{i}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{i}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot \right.
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\ {}_{i}\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik})}^{(\ )} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}}^{\ \ -\mathbb{k}_2}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} - j_{ik} - 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!}$$

$$\frac{(\ )}{(D - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} \ \ j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l}$ $j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge \ = \mathbb{k} > \ \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}$ $j_{sa} - 1$ $j_{sa} \leq j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \ \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa} \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = \ \mathbb{k} \wedge$

$\mathbb{k} = \ \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\ {}_{i}\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik})}^{(\ )} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!}$$

$$\sum_{l(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}} \cdots$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(\cdots=n_i-j_{ik}+1)\ n_{sa}=n_{ik}} \cdots{}^{sa}-\mathbb{k}_2$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} \cdots - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\cdots + 2 \cdot j^{sa} + 2 \cdot \cdots - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{\cdots + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq \cdots - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq \cdots \leq j^{sa} + \cdots - j_{sa} \wedge$

$\cdots + j_{sa} - j_{sa}^{\cdots} \cdot j^{sa} \leq \cdots + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} \cdots j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \cdots + j_{sa}^{ik} \cdots > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D \cdots j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \cdots D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \cdots \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \cdots j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$\cdots + j_{sa} \cdots j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S}_{j_{ik}} \sum_{k=\ _{i}\boldsymbol{l}}^{(\ )} \sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{sa}}-\ _{i}\boldsymbol{l}+}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}}^{(n_i-j_{ik}-\ 1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} \quad (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{s} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!\cdot\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})!\cdot(\boldsymbol{n} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}\big) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa}\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik} \cdots, \mathbb{k}_2, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + 1 \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}\right.$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)!\cdot(n_i - n_{ik} - j_{ik} + 1)!}\cdot$$

$$\left.\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)!\cdot(n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}\right)\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-}^{\boldsymbol{l_{ik}}+}\sum_{j^{sa}=\boldsymbol{l_{sa}}-}^{\boldsymbol{l}-j_{sa}^{ik}+1}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{sa}^{ik}-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right)}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\right.-j_{sa})!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(+j_{sa}-j^{sa}}\Big)-$$

$$\sum_{k}\ \sum_{(j_{ik}=j^{sa}+-j_{sa})\ j^{sa}-}^{(\ )\ j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum^{-D-s}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+\Delta^{sa}+2\right.^{ik}_{sa}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$(D>1\ldots n\wedge \boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+2\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 2 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}})) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{Z\ldots,j^{sa}} = \sum_{k=\boldsymbol{l}\ (\ldots=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+\ldots} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}\ (n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{\ldots j_{ik}-\mathbb{k}_1+1)\quad n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{i}^{}}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}^{}-\mathbb{k}_{}-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-)!}\cdot$$

$$\frac{1}{(+2\cdot j^{sa}+j_{sa}^{}-j_{ik}-2\cdot j_{sa})!}\cdot$$

$$\frac{(-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{}-j_{ik}-\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!\right.}\cdot$$

$$\frac{(D-_i)!}{(+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{}!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-+1\wedge$$

$$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{}}-j_{sa}^{ik}+1\wedge$$

$$j_{sa}^{ik}+\leq j_{ik}\leq j^{}-j_{sa}^{ik}-j_{sa}-1\wedge$$

$$j_{}+j_{sa}-j_{sa}^{}-1\leq j^{}<\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge+j_{sa}^{ik}-\boldsymbol{l_{}}>\boldsymbol{l_{ik}}\big)\vee$$

$$(D\geq\boldsymbol{n}\wedge\boldsymbol{l_s}>D-+1\wedge$$

$$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_{}}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$$

$$j_{sa}^{ik}+1\leq\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$$

$$+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\big)\big)\wedge$$

$$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$$

$$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$$

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$\boldsymbol{s}\colon \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \land$

$s \geq 5 \land \boldsymbol{s} = s + \mathbb{k} \land$

$\mathbb{k}_z\colon z = 2 \land \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\cdots} \right. $$

$$ \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} $$

$$ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot $$

$$ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot $$

$$ \frac{(\cdots - \boldsymbol{l} - j_{sa}^{ik})!}{(\cdots - j_{ik} \cdots + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot $$

$$ \left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) + $$

$$ \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right. $$

$$ \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} $$

$$ \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot $$

$$ \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot $$

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$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}\sum^{\boldsymbol{l_{s}}+1}_{-j_{ik}+j_{sa}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum^{(n_i-j_{ik}}_{\mathbb{k}_2-j_{ik}+1)}\sum_{=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_2}$$

$$\frac{(n_i-$$
$$(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-$$
$$(j^{sa}-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right.} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{(\ )} \sum_{j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D}^{\boldsymbol{l_s} + j_{sa} - \boldsymbol{l}} \right.$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\left. \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \right) \cdot$$

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$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{l}}^{}\sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(\boldsymbol{l}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{}\sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\ \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-1)}^{\boldsymbol{l_{sa}}+\boldsymbol{n}-1}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{(j_{ik}+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_i-j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-\quad-1)!}{(j_{ik}-\quad)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-\quad-1)!\cdot(j_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\ \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right.!}$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-j^{sa}\quad)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+2\leq\boldsymbol{l}\leq D-\boldsymbol{n}\quad 1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j^{ik}\quad j_{sa}>\quad\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j^{ik}<j_{sa}-1\wedge j_{s}\quad=j_{sa}^{ik}-1$

$\boldsymbol{s}:\left\{j_{sa}^{s}\quad\mathbb{k}_1,j^{ik}\cdots,\mathbb{k}_2,\quad\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=s+\quad\wedge$

$\mathbb{k}_z:2\quad 2\wedge\mathbb{k}=\mathbb{k}_1+\quad\Rightarrow$

$$fzS_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-}\sum_{=j_{ik}+j_{sa}-j_{sa}}$$

$$\sum_{n_i}\sum_{+\mathbb{k}}^{(j_s+1)}\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)$$

$$\sum_{n_i}\sum_{m_{is}+j_{sa}^{s}-j_{s}^{ik}-\mathbb{k}_1}^{(\ )}\left(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)$$

$$\frac{\left(n_i+2\cdot j^{sa}+\cdots j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{\left(\cdots n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2\right)!}\cdot$$

$$\frac{1}{\left(\cdots 2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \cdots \boldsymbol{l} \cdots n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D \cdots \boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1 \wedge$

$j_{sa} \cdots \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{} \sum_{j^{sa}=j_{sa}-j_{sa}^{ik}}^{} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{\left(j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa}\right)}^{\boldsymbol{l_s} + 1} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{j_{sa}^{ik} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{\left(n_{ik} = n_i - j_{ik} + 1\right)}^{(n_i - j_{ik} + 1)} \sum_{j^{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(n_{ik} - j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - n_{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{\left(j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s\right)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{\left(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik}\right)}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{s} - j_{sa}^{ik} - \mathbb{k}_1} \sum_{\left(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2\right)}^{(\ )}$$

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$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1\geq\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right.$

$s\geq5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}} \sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}+\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{sa} - s - 2 \cdot \mathbb{k}_2 - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} - 2 \cdot j_{sa}^{ik} - j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{sa} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j^{sa} + \boldsymbol{l_i})!}{(D + j^{sa} + \boldsymbol{l_i} - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{sa} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{ik}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge l = \mathbb{k} > 0 \wedge$

$j_{sa} \geq j_{sa}^{s} - 1 \wedge j_{sa} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-j_{sa})}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+\quad)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}-\boldsymbol{l_{sa}}-s}{(D+j^{sa}-\boldsymbol{n}-\quad)!\cdot(\quad-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}-\quad-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{+\quad j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{\left(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-j_{sa}\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{j^{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2+1}
$$

$$
\frac{(n_{ik}-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_{ik}-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(n_{sa}-j_{ik}-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\left(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)}^{(\ )}
$$

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$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1\geq\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right.$

$s\geq5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$f_{\mathbb{k}}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1\right)}\sum_{\left(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D\right)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\left(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1\right)}^{\left(n_i-j_{ik}-\mathbb{k}_1+1\right)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{j_{ik}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot \quad - s - 2 \cdot \quad - \mathbb{k}_1 - \mathbb{k}_2\right)}{(n_i - \boldsymbol{n} - \quad - \quad)!} \cdot$$

$$\frac{}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + \quad \cdot j_{sa}^{ik} - \quad - j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{\quad - \boldsymbol{l} - 1)!}{\quad + j_{sa}^{ik} - j \quad - \boldsymbol{l})! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\quad - \boldsymbol{l_i})!}{(D + j^{sa} + \quad - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} \quad D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j \quad \leq j^{sa} + \quad - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq \quad \leq \boldsymbol{n} + \quad - \quad \wedge$

$\boldsymbol{l_{ik}} - \quad + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_s} \quad + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \quad = \mathbb{k} > \quad \wedge$

$j_{sa} \quad - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j \quad \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$\quad = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

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$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ \ )} \sum_{(n_{sa}=n_{ik}+j_{i}^{}}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_{}-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-)!}\cdot$$

$$\frac{1}{(+2\cdot j^{sa}+ j_{sa}^{} - j_{ik} - 2\cdot j_{sa})!}\cdot$$

$$\frac{(-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j - j_{ik} - \cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!\right.}\cdot$$

$$\frac{(D-_i)!}{(+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j)!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}-1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l}-j_{sa}^{ik}+1 \leq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}-j_{sa}^{ik}-j_{sa} \geqslant \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=-0 \wedge$

$j_{sa} \leq j_{sa}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{i}, \mathbb{k}_{}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 0 \wedge s \leq s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{}^{}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\ )!}\cdot$$

$$\frac{1}{\left(n+2\cdot j^{sa}+\ _{sa}-2\cdot j_{ik}-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\ -\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{}^{}-j_{ik}-\ \right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+j_{}^{}-\boldsymbol{n}-\boldsymbol{l_i}-j_{}^{}\ )!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \ +1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{(\ \ )} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{ik}=\boldsymbol{n}+\mathbb{k}_2+1\right)}^{\left(n_i-j_{ik}-\mathbb{k}_1+1\right)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{(\ \ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{\left(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

$$
\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k}_1 > 0 \wedge$

$j_{sa}^{i} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{ik} + \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2 j_{sa}^{ik}, \cdots, j_{sa}^{ik}\} \wedge$

$s \geq 5 \wedge s = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_2 \Rightarrow$

$$fzS_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l} - j_{sa} + 1)} \sum_{\left(j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa}\right)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} -} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}})!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{(j_{ik}=\boldsymbol{l_i}+j_{sa}^{ik}-D-s)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j_{sa}=j_{sa}^{ik}}^{} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{k=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + \quad j^{sa} + 2 \quad {}_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \boldsymbol{n} \quad n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$$

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$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+1}^{D-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}}^{(n_i-j_{ik}-\mathbb{k}_2+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(n_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right.!}$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-j^{sa}\quad)!}$$

$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\quad+j_{sa}-s>\quad)\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+\quad\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-\quad\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq\quad^{sa}\leq\boldsymbol{n}+j_{sa}-\quad\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\quad>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\quad>0\wedge$

$j_{sa}\leq\quad-1\wedge j_{sa}^{ik}<\quad-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,j_{sa}\cdots,\mathbb{k}_2,j\cdots,j_{sa}^{i}\}\wedge$

$s\geq\quad\wedge\quad=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\quad=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$fzS_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_{sa} - s)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}})!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{(j_{ik}=\boldsymbol{l_i}+j_{sa}^{ik}-D-s)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{k=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}$$

$$\frac{\left(n_i + \cdots j^{sa} + 2 \cdots_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$((D \geq \boldsymbol{n} \cdots \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

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$j_{sa}^{ik}+1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le \boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\big)\wedge$

$D\ge \boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\le j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\ge 5\wedge \boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z\colon z=2\wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$
{}_{fz}S_{j^{sa}}=\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})}\ \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-D-s}^{}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}_{2}-j_{ik}+1)}^{(n_i-j_{ik}-1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(\quad-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{\quad}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}\ \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa})}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+\quad)!\cdot(j_{ik}-j_{sa}^{ik}\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}\quad\boldsymbol{l}_{\quad}-j_{sa})}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\quad)!\cdot(j^{sa}\quad-j_{sa})!}\cdot$$

$$\frac{(\quad+j_{sa}-\quad-s)!}{(\quad+j^{sa}-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}\quad_{a}-j^{sa}-s)!}-$$

$$\sum_{\quad=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$$

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$j_{sa}^{ik}+1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le \boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\vee$

$(D\ge\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le \boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\big)\wedge$

$D\ge\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\le j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s\ge5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$
{}_{fz}S_{j_{ik},j}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-\cdots-s-1)}\ \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}\ \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(\quad - 1)!}{(n_{\quad} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}}}{(\quad - j_{ik} - \quad + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + \quad - \boldsymbol{l_{ik}} - \quad)!}{(j_{ik} + \quad - j^{sa} - \boldsymbol{l_{ik}}) \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{s} \quad \boldsymbol{l_{sa}} - s)!}{(D \quad j^{sa} - \boldsymbol{l} \quad \boldsymbol{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}$ [illegible] $) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ [illegible] $\wedge \boldsymbol{l_i}+$ [illegible] $-s=\boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}$ [illegible] $+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+$ [illegible] $\leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 >$ [illegible] $\wedge \boldsymbol{l_{sa}}+$ [illegible] $-j_{sa} \leq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}})\big) \wedge$

$D \geq$ [illegible] $< n \wedge I = \mathbb{k} >$ [illegible] $\wedge$

$j_{sa} \leq j_{sa}^{i}$ [illegible] $\wedge j_{sa}^{ik} < j_{sa}$ [illegible] $-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j$ [illegible] $j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} =$ [illegible] $+\mathbb{k} \wedge$

[illegible] $\wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+\boldsymbol{n}-D)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{}^{}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\ )!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+\ _{sa}-2\cdot j_{ik}-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\ -\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{}^{}-j_{ik}-\ \right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+j_{}^{}-\boldsymbol{n}-\boldsymbol{l_i}-j_{}^{})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\left((D\geq \boldsymbol{n}<n\wedge \boldsymbol{l_s}>D-\ +1\wedge\right.$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq \boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\vee$$

$$(D\geq \boldsymbol{n}<n\wedge \boldsymbol{l_s}>D-\boldsymbol{n}+$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{}^{}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq \boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\vee$$

$$(D\geq \boldsymbol{n}<n\wedge \boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq \boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\vee$$

$$(D\geq \boldsymbol{n}<n\wedge \boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

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$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik}^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{j_{ik}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}_{\mathbb{k}_2}-j_{ik}+1)}^{(n_i-j_{ik}-1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(\quad 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j \quad - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa})}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+\quad)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}\quad-\boldsymbol{l}_{\quad}-j_{sa})}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}-\quad)!\cdot(j^{sa}-j_{ik}-\quad-j_{sa})!}\cdot$$

$$\frac{(\quad+j_{sa}-\quad-s)!}{\quad+j^{sa}-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}-j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j_{ik}-\quad+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\quad} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

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$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right.!}$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-j^{sa}\quad)!}$$

$$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\quad+j_{sa}-s>\quad\wedge$$

$$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$$

$$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-\quad\wedge j_{sa}^{s}=j_{sa}^{ik}-$$

$$\boldsymbol{s}\colon\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots\ \mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}$$

$$s\geq 5\wedge\boldsymbol{s}=\quad+\mathbb{k}\wedge$$

$$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\quad+\mathbb{k}_2$$

$${}_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\ \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-$$

$$\sum_{k=\boldsymbol{l}}^{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1\right)}\sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D\right.}\sum_{\left.j^{sa}=j_{ik}+\right.}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}\sum_{\left(n_{i}\right.}$$

$$\sum_{n_{ik}=n_{is}+}\sum_{j_{sa}^{ik}-\mathbb{k}_1\ (}$$

$$\frac{\left(n_i+2\cdot j^{sa}+\right.\cdot j_{sa}^{ik}-2\cdot j_{ik}\left.-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(\quad-\boldsymbol{n}-\mathbb{k}_1\ \mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n}\ \ n \wedge \boldsymbol{l_s} > D - \ + 1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik}\ \ ^{sa}+\ a - j_{sa} \wedge$

$j_{ik}\ \ j_{sa}\ \ _{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\ > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} -}{(j_{ik}-2)! \cdot (n_i - n_{ik} - k + 1)!}
$$

$$
\frac{(n_{ik} - n_{sa} \mathbb{k}_2 - 1)}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik} - n_{sa} - j^{sa} -)!} \cdot
$$

$$
\frac{(n_{sa} -)!}{(n_{sa} - j^{sa} - 1)! (\boldsymbol{n}-j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - \boldsymbol{l} + 1 (j_{ik}-j_{sa}^{ik}-1)!} \cdot
$$

$$
\frac{(D+j_{sa} \boldsymbol{l_{sa}}-s)!}{(D+j \boldsymbol{n}-\boldsymbol{l_{sa}}) (\boldsymbol{n}+j_{sa}-j^{sa}-s)!} -
$$

$$
\sum_{k=}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

$$
\frac{1}{(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},\ldots} = \sum_{k=\boldsymbol{l}}^{\ldots} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}-\ldots-D-s)}^{\ldots} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{(\ldots+j_{sa}^{ik}-\boldsymbol{l}-s)}
$$

$$
\sum_{\ldots=\boldsymbol{n}+\mathbb{k}}^{\ldots} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_{i\ldots}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$
\sum_{k=\boldsymbol{l}}^{\ldots} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\ldots}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{\left(\boldsymbol{l_s}+j_{ik}-j_{ik}-\boldsymbol{l}\right)!\,(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j^{sa}+s-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\vee$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}+1\leq j_{ik}<j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\Big)\wedge$$

$$D\geq\boldsymbol{n}<n\wedge\mathbb{k}>\mathbb{k}\wedge$$

$$j_{sa}^{s}=j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$$

$$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$$

$$s\geq 5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$$

$$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\boldsymbol{l})!}{(j_{ik}+\boldsymbol{l}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\;-$$

$$\sum_{k=\boldsymbol{l}}^{}\sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{(\quad)}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\left(n_{is}=\right.}^{(n_i}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}}^{(\quad)}\sum_{}^{}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\quad s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\quad>D-\quad+1\wedge$$

$$j_{sa}^{ik}+\quad\leq j_{ik}\leq j^{sa}+\quad j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-\quad j_{sa}^{ik}\leq j^{sa}\leq\quad+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-\quad+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\vee$$

$$(D\geq\boldsymbol{n}<\quad\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$\quad+1\quad\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\Big)\wedge$$

$$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D}\sum_{-j^{sa}=j_{ik}+j_{sa}-j_s}$$

$$\sum_{n_i+\mathbb{k}}^{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(n+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{l} < n \wedge \boldsymbol{l} \neq \boldsymbol{_i l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq \boldsymbol{n}+j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}-\boldsymbol{n}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D+j_{sa}-\boldsymbol{n} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}} \sum_{j^{sa}=j_{sa}+1}^{}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}^{}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{j^{sa}=j_{sa}}^{}$$

$$\sum_{}^{-j_s+1)}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}}^{n_i+\mathbb{k}}$$

$$\sum_{n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{n_i+2\cdot j^{sa}+\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\quad 2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq {}^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} \quad - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{=\boldsymbol{n}}^{n_{ik}+} {}^{sa}-j^{sa}-\mathbb{k}_2 \; {}^{sa}+1
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - {}^{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=j_{sa}+2}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\quad)}\sum_{(\quad)}^{\boldsymbol{l_{sa}}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(\quad)}^{(n_i-j_{ik}+1)}\sum_{(\quad)}^{n_{ik}+j_{ik}-\mathbb{k}_2}$$

$$\frac{(n_i-$$

$$\frac{(n_{ik}-$$

$$\frac{(n_{sa}-1)!}{(\quad)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z \geq 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{(\ )} \sum_{j^{sa} = j_{sa}+1}^{\boldsymbol{l_s} + j_{sa} - \boldsymbol{l}} \right.$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\left. \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \right) \cdot$$

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$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}}\ \sum_{j^{sa}=j_{sa}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-\quad-1)!}{(\quad)!\cdot(n_i-\quad-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-\quad}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+\quad-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}\quad 1)!}{(n_{sa}+\quad-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(\boldsymbol{l}+\quad-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{\left(j_{ik}=j_{sa}^{ik}+\right.}\sum_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}$$

$$\sum_{}^{(\quad j_s+1)}$$

$$\sum_{n_i}\sum_{\mathbb{k}\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}$$

$$\sum_{n_{}\quad n_{is}+j_{sa}^{s}-j_{}^{ik}\quad \mathbb{k}_1}\ \sum^{(\quad)}_{\left(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)}$$

$$\frac{n_i+2\cdot j^{sa}+\quad j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{\quad i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\ \boldsymbol{n}\ \ a\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq\ ^{a}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{s}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}} \sum_{n_{sa}=\boldsymbol{n}} \quad (n_i-j_{ik}-\mathbb{k}_1+1) \quad n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \quad {}^{j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1} \quad (n_i-j_{ik}-\mathbb{k}_1+1) \quad n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum^{(n_i}$$

$$\sum \sum^{(\ )}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} \quad 2 \cdot j_{ik} \quad 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} \quad \mathbb{k}_1 - \mathbb{k}_2} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + \quad j^{sa} + 2 \cdot j_{s} \quad 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + \quad s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \quad \boldsymbol{l} \wedge \boldsymbol{l_s} \quad D - \boldsymbol{n} \quad \wedge$

$j_{sa}^{ik} \quad \leq j^{sa} + j_{sa}^{ik} \quad j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} \quad j_{sa}^{ik} + 1 \leq j^{s} \quad \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} \quad j_{sa}^{ik} + 1 = \boldsymbol{l_s} \quad \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D + \quad - \boldsymbol{n} \wedge$

$\quad > \boldsymbol{n} \quad \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{l_{sa}} - s)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = \cdots + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_{is} = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k}}^{(n_i - \cdots + 1)} \cdots - j_{ik})$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{s} - \mathbb{k}_1}^{(\ )} \sum \cdots - j^{sa} - \mathbb{k}_2)$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - \cdots - 2 \cdot j_{ik} - \cdots - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \cdots - \mathbb{k}_1 - \mathbb{k}_2)} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + \cdots^{sa} + 2 \cdot j^{\cdots} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + \cdots - s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \cdots \boldsymbol{l} \wedge \boldsymbol{l_s} \cdots D - \boldsymbol{n} \cdots 1 \wedge$

$j_{sa}^{ik} \cdots \leq j^{sa} + j_{sa}^{ik} \cdots j_{sa} \wedge$

$j_{ik} + j_{sa} - \cdots j_{sa}^{ik} \leq j^{sa} \leq \cdots + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} \cdots + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D + \cdots - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$\cdots \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} -}{(j_{ik}-2)! \cdot (n_{} - n_{ik} - _k + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} n_{sa} - j^{sa} -)!} \cdot
$$

$$
\frac{(n_{sa} -)!}{(n_{sa} {}^{sa} - 1) n - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - \boldsymbol{l} + 1) (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} \boldsymbol{l_{ik}} - j_{sa})!}{(\boldsymbol{l_{sa}} - a - \boldsymbol{l_{ik}}) (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

$$
\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$j^{\{j_{ik}, j^{sa}\}} \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(j_{ik}+j^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{ik}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}\sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=\boldsymbol{l}} \sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{(\ )} \sum_{\boldsymbol{l}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik}+1}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+} \sum_{\left(n_{is}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{} \sum_{\left(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + \boldsymbol{l} - j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(\boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l} + j_{sa} - \boldsymbol{sa} - j_{sa}^{ik} + 2 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l} - 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$+ j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}}^{n_{ik}-j^{sa}-\mathbb{k}_2} {}^{sa}+1}
$$

$$
\frac{(n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_{ik}-j_{ik}+}\cdot
$$

$$
\frac{(n_{ik}-1)}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(-1)!}{(n_{sa}-j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(-\boldsymbol{l}-j_{sa}^{ik})!}{(-j_{ik}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot
$$

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$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_i} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots sa\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2 \Rightarrow$

$$S_{j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\right.$$

$$\left.\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\right)$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-1)!}{(\quad)!\cdot(n_i-\quad-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-\quad-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+\quad-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}\quad 1)!}{(n_{sa}+\quad-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(+\boldsymbol{l}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)\cdot$$

$$\sum_{k=\boldsymbol{l}}^{}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\sum_{=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-}$$

$$\sum_{}^{(j_s+1)}$$

$$\sum_{n_i+\mathbb{k}\,(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{n_i+m_{is}+j_{sa}^{s}-j_{s}^{ik}-\mathbb{k}_1}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{n_i+2\cdot j^{sa}+\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{\boldsymbol{l_i}-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{l} \geq n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_{ik}}+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+2 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$j_{sa}-j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik} \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=\boldsymbol{l}+\boldsymbol{n}-D}^{\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}+1)} \sum_{n_{ik}+j_{ik}-\mathbb{k}_2}^{\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik}}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right.} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - \wedge j_{sa}^{s} = j_{sa}^{ik} - \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right)$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z.z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$_{fz}S_{j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} + 1)} \sum_{\left(j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa}\right)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \right.$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\left. \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \right) \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l}+\boldsymbol{n}-D}^{}\right.$$

$$\left.\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\right.$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right)} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - \right. - j_{sa})!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\quad + j_{sa} - j^{sa} \quad)!}\Bigg) -$$

$$\sum_{(j_{ik}=\boldsymbol{l_i}+1}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{\quad -D-s)}^{\quad} \quad {}_{sa}-j_{sa}^{ik}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{\quad} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i + \quad {}^{sa} + 2 \quad {}_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\boldsymbol{n} > \boldsymbol{n} < \quad \wedge \boldsymbol{l} \neq \quad {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

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$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$$

$$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$
\begin{aligned}
{}_{fz}S_{\,j_{ik},j^{sa}} = \Bigg(& \sum_{k=\boldsymbol{l}}^{} \sum_{(j_{ik}=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{} \\
& \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
& \frac{(n_{sa} + j_{ik} - j^{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
& \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot \\
& \frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot \\
& \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) + \\
& \Bigg(\sum_{k=\boldsymbol{l}}^{} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \\
& \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
& \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
\end{aligned}
$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{n}\sum_{n_i=\boldsymbol{n}+\mathbb{k}\,(n_{ik}=\boldsymbol{n}_{ik}-j_{ik}-\mathbb{k}_2-1)}^{n_i-j_{ik}-\mathbb{k}_2-1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\ \ \cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\ \ -1)!}{\left(\boldsymbol{l_s}+\ \ -j_{ik}-\boldsymbol{l}\right)!\ \ -j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-\ \ ^{sa}+s-\ \ \boldsymbol{l_i}-j_{sa}\ \ \cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}-\ \ _{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-\ \ _{sa}=\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\ \ >0\wedge$

$j_{s}\leq j_{sa}^{i}-\ \ \wedge j_{sa}^{ik}<j_{s}-1\wedge j_{sa}^{s}=j_{sa}^{i}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\ \ j_{sa},\cdots\right\}$

$s\geq 5\wedge\ \ =s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\ \ =\mathbb{k}_1+\ \ \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right)} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - {}^{sa} - s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} -)} \sum_{(j_{ik} = j_{sa}^{ik} }$$

$$\sum_{(j^{sa} = j_{ik} + j_{sa} - j_s + 1)}$$

$$\sum_{+\mathbb{k}\,(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik})}$$

$$\sum_{= n_{is} + j_{sa}^{s} - j_{sa}^{ik} \; \mathbb{k}_1}^{(\ )} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{n_i + 2 \cdot j^{sa} + \cdot j_{sa}^{ik} - - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{(\boldsymbol{n} 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \quad n \wedge \boldsymbol{l} \neq \quad \boldsymbol{i} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq \quad + j_{sa}^{ik} - j_{sa} \wedge$

$\quad - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \leq D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l} - j_{sa} + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}
$$

$$
\sum_{n_{ik} = n_{is} + j_{sa}^{s} - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

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$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\Big)$

$D \geq \boldsymbol{n} < n \wedge I = \ldots > 0 \wedge$

$j_{sa}^{i} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}^{ik}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{s, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_{j_{sa}}, \cdots, j_{sa}\}$

$s \geq 5 \wedge \ldots = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}_z = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-s+1}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}-\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(\quad-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - \quad \cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s} - \quad - 1)!}{\left(\boldsymbol{l_s} + \quad j_{ik} - \boldsymbol{l}\right)!\ (j_{ik} - j_{sa}^{ik} - 1)!}\cdot$$

$$\frac{(D - \quad \boldsymbol{l_i})!}{(D - j^{sa} + s - \quad \boldsymbol{l_i} - j_{sa} \quad \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + \quad \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} \quad _{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} \quad _{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq \quad + \boldsymbol{l_s} + s - \boldsymbol{n} - \quad) \vee$

$(\quad \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \quad \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \quad j_{ik} \leq j^{sa} + j_{s} \quad - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad j_{sa}^{ik} \leq j^{sa} \leq \quad + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \quad \boldsymbol{l} \wedge \boldsymbol{l} \quad + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \quad j_{sa} \quad < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < \quad \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\boldsymbol{l}\right)!}{\left(j_{ik}+\boldsymbol{l}-j^{sa}-\boldsymbol{l_{ik}}\right)!\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} + 1)} \sum_{\left(j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s\right)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum^{(n_i \quad +1)} \left(n_{is} \quad - j_{ik}\right)$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_2}^{(\quad)} \quad = n_{ik} \quad - j^{sa} - \mathbb{k}_2)$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - \quad - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} \quad \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + \quad j^{sa} + 2 \cdot j_{s} \quad - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + \quad a \quad s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \quad \boldsymbol{l} \wedge \boldsymbol{l_s} \quad D - \boldsymbol{n} \quad \wedge$

$j_{sa}^{ik} \quad \leq j^{sa} + j_{sa}^{i} \quad j_{sa} \wedge$

$j_{ik} + j_{sa} \quad \leq j^{sa} \leq \quad + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} \quad + 1 = \quad \boldsymbol{sa} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \quad \leq \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$\quad > \boldsymbol{n} < \quad \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\boldsymbol{l})!}{(j_{ik}+\boldsymbol{l}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

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1000 $D > \boldsymbol{n} < n$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum^{(n_i \quad +1)} \left(n_{is} \quad - j_{ik}\right)$$

$$\sum_{n_{ik}=n_{is}+j_{sa}} \sum^{(\ )} \quad =n_{ik} \quad - j^{sa} - \mathbb{k}_2)$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + \quad s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \quad \boldsymbol{l} \wedge \boldsymbol{l_s} \quad D - \boldsymbol{n} \quad \wedge$

$j_{sa}^{ik} \quad \leq j^{sa} + j_{sa}^{ik} \quad j_{sa} \wedge$

$j_{ik} + j_{sa} \quad \leq j^{sa} \leq \quad + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} \quad + 1 = \quad \boldsymbol{sa} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \quad \leq \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$\quad > \boldsymbol{n} < \quad \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\boldsymbol{l})!}{(j_{ik}+\boldsymbol{n}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{\left(j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s\right)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{\left(n_{is} = n_i - j_{ik}\right)}^{(n_i + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{ik} - \mathbb{k}_1}^{(\ )} \sum_{\left(n_{ik} - j^{sa} - \mathbb{k}_2\right)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_{sa} - s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \leq \boldsymbol{l} \wedge \boldsymbol{l_s} \geq D - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{sa} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} - \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$\boldsymbol{n} > \boldsymbol{n} \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \ldots}{(j_{ik}-2)! \cdot (n_i - n_{ik} - \ldots_k + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \ldots)!} \cdot
$$

$$
\frac{(n_{sa} - \ldots)!}{(n_{sa} - \ldots^{sa} - \ldots - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \ldots \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - \ldots - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} - \ldots \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \ldots \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

$$
\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_{sa}}+s-\boldsymbol{n}-j_{sa} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}<j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\colon \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z\colon z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$S_{j_{ik},j^{sa}} \sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+1}^{n} \sum_{i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\ \ \cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\ \ -1)!}{\left(\boldsymbol{l_s}+\ \ -j_{ik}-\boldsymbol{l}\right)!\ \ -j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-\ \ ^{sa}+s-\boldsymbol{l_i}-j_{sa}^{\ \ }\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}-\ \ _{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-\ \ _{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l}-j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$D\geq\boldsymbol{n}<n\wedge\ \ =\mathbb{k}>\ \ \wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}<j_{sa}-\ \ j_{sa}^{s}-j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\ \ j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{s}\cdots,j_{sa}^{i}\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=\ \ +\mathbb{k}\wedge$

$\mathbb{k}_{\ }\ \ \wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}}$$

$$\frac{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})!}{(\boldsymbol{n} + j_{sa} - j$$

$$\sum_{k=}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} +}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i - j_s + 1)}$$

$$\sum_{k=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )}$$

$$\frac{\left(n_i + \quad j^{sa} + 2 \quad j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < \quad \wedge \boldsymbol{l} \neq \quad _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{+\mathbb{k}_2-j_{ik}+1)} \sum_{a=\boldsymbol{n}-j^{sa}+1}^{(n_i-j_{ik}} \sum_{+1)}^{n_{ik}+j_{ik}} \sum_{-\mathbb{k}_2}
$$

$$
\frac{(n_i}{(j_{ik}-2)} \frac{}{(n_i-n_{ik}-j_{ik}+1)!} \cdot
$$

$$
\frac{(n_{ik}}{(j^{sa}} \frac{}{-1)! \cdot (n_{ik}} \frac{}{-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa}-1)!}{(j^{sa}-\boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)! \cdot \left(j_{ik}-j_{sa}^{ik}-1\right)!} \cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})! \cdot (\boldsymbol{n}+j_{sa}-j^{sa}-s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i+2 \cdot j^{sa}+2 \cdot j_{sa}^{ik}-2 \cdot j_{ik}-s-2 \cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!} \cdot
$$

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$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}<j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fz_{\boldsymbol{n}}^{\boldsymbol{l}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}}\sum^{(}_{n_{sa}=n_{ik}+j_{ik}-}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot\right.-s-2\cdot-\mathbb{k}_1-\mathbb{k}_2)}{(n_i-\boldsymbol{n}-\mathbb{k}_1-)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}-2\cdot j_{sa}^{ik}-\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i})!}{(D+j^{sa}+-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}-{}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j_{sa}+j_{sa}^{ik}-\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j\leq\boldsymbol{n}+j-\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{l_i}\leq D+s-)\vee$

$(D\boldsymbol{n}<n\wedge\boldsymbol{l}\neq{}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n})\Big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}} \sum_{j^{sa}=j_{sa}+1}^{}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\sum_{j^{sa}=j_{sa}+1}^{(\ )}$$

$$\sum_{(j_s=j_{sa}+1)}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(\ )}\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)$$

$$\sum_{n_i=n_{is}+j_{sa}^{s}-j_{s}^{ik}+\mathbb{k}_1}^{(\ )}\left(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)$$

$$\frac{\left(n_i+2\cdot j^{sa}+\cdots-j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{\left(\cdots_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2\right)!}\cdot$$

$$\frac{1}{\left(\cdots+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((\boldsymbol{D}\geq\cdots<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq\cdots{}^{a}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$\boldsymbol{l_i}\leq D+s-\boldsymbol{n})\vee$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

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$j_{sa}^{ik} \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \le D + s - \boldsymbol{n})) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},\dots} = \sum_{k=\boldsymbol{l}}^{(\dots-\boldsymbol{l}+1)} \sum_{(j_{ik}=\dots+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{\dots+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}\dots-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{(\dots)\,n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(\dots_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{\left(\boldsymbol{l_s}+j_{ik}-j_{ik}-\boldsymbol{l}\right)!\,(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((D\geq \boldsymbol{n}<n\wedge \boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge \boldsymbol{l_s}\leq D-\boldsymbol{n}+\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq \boldsymbol{n}\ _{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}\ _{a}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l}\ j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq\ +\boldsymbol{l_s}+s-\boldsymbol{n}-\ )\vee$$

$$(\ \geq \boldsymbol{n}<n\ \neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\ \leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\ j_{ik}\leq j^{sa}+j_{s}\ -j_{sa}\wedge$$

$$j_{ik}+j_{sa}\ j_{sa}^{ik}\leq j^{sa}\leq\ +j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1\ \wedge\ +j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$$

$$D\ j_{sa}\ <\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\Big)\wedge$$

$$D\geq\boldsymbol{n}<\ \wedge I=\mathbb{k}>0\wedge$$

$$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$$

$$\boldsymbol{s}\colon\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$$

$$s\geq 5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$$

$$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})\,\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-s)!}{(j_{ik}+\boldsymbol{n}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{}\sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{(\ \ )}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\left(n_{is}=\right.}^{(n_i\ \ +1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{}}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}\ \ 2\cdot j_{ik}-\ \ 2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}\ \ \mathbb{k}_1-\mathbb{k}_2}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+\ \ j^{sa}+2\cdot j_{s}^{}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\ \ s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\ \ \ \boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\ \ +1\wedge$$

$$j_{sa}^{ik}\leq\ \ \leq j^{sa}+j_{sa}^{ik}\ \ _{sa}\wedge$$

$$j_{ik}+j_{sa}-\ \ ^{ik}\leq j^{sa}\leq\ \ +j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}\ \ _{s}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$D+s-\boldsymbol{n}\ \ \boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1)\vee$$

$$(\ \ \ \ <n\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$$

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$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik})}^{\boldsymbol{l_s}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}}^{D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right)}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\quad-j_{sa}\right)!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\quad+j_{sa}-j^{}-)!}\ -$$

$$\sum_{(j_{ik}=\boldsymbol{l_i}+}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{}^{}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+\quad j^{sa}+2\quad{}_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$(D\geq \boldsymbol{n}\quad n\wedge \boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge \boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq \boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$$

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$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{\cdots}{}_{\cdots}{}^{sa} = \sum_{k=\boldsymbol{l}} \sum_{(j_{\cdots}{}^{ik}_{sa}+1)} \sum_{j^{sa}=j_{sa}+1}^{j_{sa}+j_{sa}^{ik}-j_{s\cdots}{}^{\cdots}{}_{k}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{j_{ik}-\mathbb{k}_1+1)\quad n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-\quad-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(\quad-1)!}{(n_{\quad}+j^{sa}-\boldsymbol{n}\quad1)!\cdot(\boldsymbol{n}-j^{s}\quad}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}\quad^{ik}}{(\quad-j_{ik}-\quad+1)!\cdot(j_{ik}-\quad_{sa}^{}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+\quad^{ik}-\boldsymbol{l_{ik}}\quad_{sa})!}{(j_{ik}+\quad-j^{sa}-\boldsymbol{l_{ik}})!\,(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{s}\quad\boldsymbol{l_{sa}}-s)!}{(D\quad j^{sa}-\boldsymbol{n}\quad_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},\ldots} = \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}\ldots_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\right.
$$

$$
\sum_{=\boldsymbol{n}+\mathbb{k}}^{\ldots} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_{i}\ldots-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik}-2)!\cdot(n_i - n_{ik} - j_{ik} + 1)!}\cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)!\cdot(n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)!\cdot(\boldsymbol{n} - j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)!\cdot\left(j_{ik} - j_{sa}^{ik} - 1\right)!}\cdot
$$

$$
\left.\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})!\cdot(\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=j_{sa}+2}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\right.
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l_{ik}}-j_{sa}^{ik}+1}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{s}^{} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 -)!}\cdot$$

$$\frac{1}{(\boldsymbol{n} + 2\cdot j^{sa} + j_{sa}^{} - 2\cdot j_{ik} - 2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s} + j_{}^{} - j_{ik} - \right)!\cdot\left(j_{ik} - j_{sa}^{ik} - 1\right)!}\cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + \boldsymbol{n} - \boldsymbol{l_i} - j_{}^{})!\cdot(\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{s}} \leq D + j_{sa} - \boldsymbol{n}$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} -$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - \wedge$

$\boldsymbol{l}_{} - j_{sa}^{ik} + 1 \leq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} - j_{sa}^{ik} - j_{sa} \geqslant \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \ldots 0 \wedge$

$j_{sa} \leq j_{sa} - 1 \wedge j_{sa}^{ik} < j_{s} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{i} \ldots \mathbb{k}_2 \ldots, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ldots s \wedge \ldots s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \ldots \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{i}^{}}^{(\ )}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} \quad \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - 1)!}\cdot$$

$$\frac{1}{(\quad + 2\cdot j^{sa} + \quad j_{sa}^{} \quad j_{ik} \quad - 2\cdot j_{sa})!}\cdot$$

$$\frac{(\quad - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} + j_{s} - j_{ik} - \quad \cdot (j_{ik} - j_{sa}^{ik} - 1)!}\cdot$$

$$\frac{(D - \quad)!}{(\quad j^{sa} + s \quad \boldsymbol{n} - \boldsymbol{l_i} - j \quad)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \quad \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + \quad - j_{sa}^{ik} \leq j^{s} \quad \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \quad \wedge \boldsymbol{l_{sa}} + \quad - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_i} \leq \quad + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < \quad \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \quad \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq \quad \leq j^{sa} \quad - j_{sa} \wedge$

$j_{ik} + j_{sa} - \quad \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\quad - j \quad 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{s}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}}^{n_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_{ik}-j_{ik}+1)!} \cdot
$$

$$
\frac{(n_{ik}-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}-j_{ik}-n_{sa}+\mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}-j^{sa}-\boldsymbol{n}+1)! \cdot (\boldsymbol{n}-j^{sa})!} \cdot
$$

$$
\frac{(j_{sa}^{ik}-\boldsymbol{l}-j_{sa}^{ik})!}{(j_{ik}-j_{sa}^{ik}+1)! \cdot (j_{ik}-j_{sa}^{ik}-1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})! \cdot (j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!} \cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})! \cdot (\boldsymbol{n}+j_{sa}-j^{sa}-s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!} \cdot
$$

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$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$f_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}\right.$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\left.\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\right)\cdot$$

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$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-\quad-1)!}{(\quad)!\cdot(n_i-\quad-j_{ik}+1)!}$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(+\boldsymbol{l}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)\cdot$$

$$\sum_{k=\boldsymbol{l}}^{}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\sum_{\boldsymbol{l}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-}$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{n_i+2\cdot j^{sa}+\cdots-j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{\cdots-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\cdots(2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \cdots \boldsymbol{l} \cdots n \wedge \boldsymbol{l} \neq \cdots_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D \cdots \boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1 \wedge$

$j_{sa} \cdots j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik} \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-\cdots)}^{\cdots} \sum_{j^{sa}=j_{ik}\cdots-j_{sa}^{ik}}^{\cdots} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}\cdots+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}\cdots-\mathbb{k}_2}
$$

$$
\frac{(n_i \cdots}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)!} \cdot
$$

$$
\frac{(n_{ik} \cdots_{sa}-\mathbb{k}_2 \cdots 1)!}{(j^{sa} \cdots_{ik}-1)! \cdot (n_{ik} \cdots j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa}-1)!}{(\cdots j^{sa}-\boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)! \cdot \left(j_{ik}-j_{sa}^{ik}-1\right)!} \cdot
$$

$$
\left. \frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})! \cdot (\boldsymbol{n}+j_{sa}-j^{sa}-s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\cdots} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)! \cdot (n_i-n_{ik}-j_{ik}+1)!} \cdot
$$

$$
\left. \frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)! \cdot (n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \right.
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_i-\quad-1)!}{(j_{ik}-\quad!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-\quad-1)!\cdot\quad+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-j^{sa}\quad)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\quad+j_{sa}-s=\quad\wedge$

$D+j_{sa}^{ik}-\boldsymbol{n}<\boldsymbol{l_{ik}}\leq D+\boldsymbol{l}\quad j_{sa}^{ik}-\boldsymbol{n}\quad1\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{ik}<j_{sa}-1\wedge j_{sa}\quad j_{sa}^{ik}-1$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{\quad}\cdots,\mathbb{k}_2,\quad\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq5\wedge\boldsymbol{s}=s+\quad\wedge$

$\mathbb{k}_z:z\quad2\wedge\mathbb{k}=\mathbb{k}_1+\quad\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}$$

$$\sum_{n_{ik}=n_{is}+}$$

$$\frac{\left(n_i+2\cdot j^{sa}+\right.}{-\boldsymbol{n}-\mathbb{k}_1}$$

$$\frac{1}{\left(\boldsymbol{n}+\right.}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n}$ $\wedge \boldsymbol{l} \neq$ $\boldsymbol{_i l} \wedge$ $\leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j$ j^{ik} $_{sa} \wedge$

j_{ik} j_{sa} $_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+$ $> \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}<j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{n}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-} \sum_{n_{sa}=}^{-j^{sa}+1}
$$

$$
\frac{(n_i - 1)!}{(j_{ik}-2)!\,(n_i - n_{ik}+1)!} \cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\,(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!} \cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}^{ik}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{n}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

$$
\frac{1}{(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\colon \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z\colon z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$\mathfrak{S}_{j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+j_{sa}^{ik}-s+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\ \cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\ -1)!}{\left(\boldsymbol{l_s}+\ -j_{ik}-\boldsymbol{l}\right)!\ -j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j^{sa}+s-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}-\ _{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-\ _{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l}-j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_s}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge\ =\mathbb{k}>\ \wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}<j_{sa}-\ \ j_{sa}^{s}\ j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\ \ j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{s}\cdots,j_{sa}^{i}\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=\ +\mathbb{k}\wedge$

$\mathbb{k}_{\ }\ \wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})}\ \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\ \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l}} \sum_{(j_{ik} = \boldsymbol{n} - D)}^{\boldsymbol{l_i} + j_{sa}} \sum_{j^{sa} = j_{ik} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 2}^{1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(\mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j \quad \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{(\ )} \sum_{j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D}^{\boldsymbol{l_s} + j_{sa} - \boldsymbol{l}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\quad\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\quad-1)!}{\left(\boldsymbol{l_s}+\quad j_{ik}-\boldsymbol{l}\right)!\quad-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-\quad+s-\quad\boldsymbol{l_i}-j_{sa}\quad\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}-\quad_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-\quad_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l}-j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_s}\leq D+\boldsymbol{l_s}+j_{sa}-\quad\boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge\quad=\mathbb{k}>\quad\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}<j_{sa}-\quad j_{sa}^{s}\quad j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\quad j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{s}\cdots,j_{sa}^{i}\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=\quad+\mathbb{k}\wedge$

$\mathbb{k}_{\quad}\quad\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)}\ \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}\ \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{n} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-D-j_{sa})}^{(\boldsymbol{l_{ik}}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}+s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\boldsymbol{\cdot}\ j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{\left(\boldsymbol{l_s}+j_{ik}-j_{ik}-\boldsymbol{l}\right)!\,(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+\ \wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}\ {}_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}\ {}_{a}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l}\ j_{sa}-s>\boldsymbol{l_{sa}}\wedge$$

$$\boldsymbol{l_i}\leq D+s-\boldsymbol{n})\vee$$

$$(\ \geq\boldsymbol{n}<n\ \neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\ \leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\ j_{ik}\leq j^{sa}+j_{s}\ -j_{sa}\wedge$$

$$j_{ik}+j_{sa}\ j_{sa}^{ik}\leq j^{sa}\leq\ +j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1\ \ \wedge\ +j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$$

$$\boldsymbol{l_{ik}}\leq D+\ {}^{ik}-\boldsymbol{n}\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\Big)\Big)\wedge$$

$$\geq\boldsymbol{n}<\ \wedge I=\mathbb{k}>0\wedge$$

$$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$$

$$\boldsymbol{s}\colon\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$$

$$s\geq 5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$$

$$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{sa}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(\quad - 1)!}{(n_{\quad} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}}{(\quad - j_{ik} - \quad + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=j_{sa}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

$$
\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}
$$

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$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$$

$$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa} \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}+\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(n_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - \quad - 2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s} - \quad - 1)!}{\left(\boldsymbol{l_s} + \quad j_{ik} - \boldsymbol{l}\right)!\ (j_{ik} - j_{sa}^{ik} - 1)!}\cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D - j^{sa} + s - \boldsymbol{l_i} - j_{sa}) \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + \quad \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} \quad _{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} \quad _{sa} = \boldsymbol{l_{ik}} \wedge$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \quad D + \boldsymbol{l_s} + j_{sa}^{ik} - \quad - 1)$

$(\quad \geq \boldsymbol{n} < n \wedge \quad \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \quad \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \quad j_{ik} \leq j^{sa} + j_{sa} \quad - j_{sa} \wedge$

$\quad + j_{sa} \quad j_{sa}^{ik} \leq j^{sa} \leq \quad + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \quad \wedge \quad + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \quad j_{sa} \quad < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < \quad \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-1)!}{(\boldsymbol{l_{ik}}-j_{ik}-1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(D+j^{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-s)!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot
$$

$$
\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}
$$

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$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \boldsymbol{l_i} + j_{sa} - s \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge$ $^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \; j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z \; 2 \wedge \mathbb{k} = \mathbb{k}_1 \; \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1} \frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot $$

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$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-\text{[illegible]}}$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_{ik}=j_{sa}^{ik}\text{[illegible]}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\ \sum_{\text{[illegible]}^{sa}=\boldsymbol{l_s}+\text{[illegible]}-\boldsymbol{l}+1}^{\text{[illegible]}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk\text{[illegible]}}^{n}\ \sum_{\text{[illegible]}-j_{ik}+1)}^{(n_i-j_{ik}-\text{[illegible]}1)}\ \sum_{\text{[illegible]}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-\text{[illegible]}\Bbbk_2}$$

$$\frac{(n_i-n_{ik}\text{[illegible]}}{\text{[illegible]}_{ik}-2)\text{[illegible]}(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-\text{[illegible]}-\Bbbk_2\text{[illegible]}1)!}{(j^{sa}-\text{[illegible]}-1)!\cdot(n_{ik}\text{[illegible]}j_{ik}-n_{sa}-j^{sa}-\Bbbk_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(\text{[illegible]}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{\text{[illegible]}(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{\text{[illegible]}_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\ \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\Bbbk}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\Bbbk_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}^{(\ )}$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right)} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}\Big) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} -$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{l} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa}^{i} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{ik}, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} \neq \mathbb{k}_1 + \mathbb{k} \wedge$

$\mathbb{k}_1 \neq \mathbb{k}_2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa} - 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)}^{\boldsymbol{l_{sa}} - \boldsymbol{l} + 1} \sum_{j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{\boldsymbol{l}=\boldsymbol{l_s}+j_{sa}^{ik}}^{(\boldsymbol{l_s}+j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{}^{}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\ \ )!}\cdot$$

$$\frac{1}{(n+2\cdot j^{sa}+\ \ _{sa}-2\cdot j_{ik}-2\cdot j_{sa})!}\cdot$$

$$\frac{(\ \ -\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{}^{}-j_{ik}-\ \ \right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\ \ \boldsymbol{l_i})!}{(D+j^{sa}+j_{}^{}-\boldsymbol{n}-\boldsymbol{l_i}-j_{}^{})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \ \ \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+\ \ -j_{sa}^{ik} \leq j^{\ \ } \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \ \ \wedge \boldsymbol{l_{sa}}+\ \ -j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+\ \ -\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+\ \ -\boldsymbol{n}-1) \vee$

$(D \geq \boldsymbol{n}\ \ \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \ \ \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq \ \ \leq j^{sa}\ \ j_{sa} \wedge$

$j_{ik}+j_{sa}-\ \ ^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l}\ \ -j_{s}\ \ 1 > \boldsymbol{l_s} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_{sa}}+s-\boldsymbol{n}-j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \le D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l} \ne \ {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \le D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \le D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\sum_{j_{ik}, j^{sa}} \sum_{k=(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(\quad - 1)!}{(n_{\quad} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{s}} \cdot$$

$$\frac{(\boldsymbol{l_{ik}}}{(\quad - j_{ik} - \quad + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + \quad - \boldsymbol{l_{ik}} \quad)!}{(j_{ik} + \quad - j^{sa} - \boldsymbol{l_{ik}}) \quad (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{s} - \boldsymbol{l_{sa}} - s)!}{(D \quad j^{sa} - \quad \boldsymbol{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{sa}}-j_{sa}+1 > \boldsymbol{l_s} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_{sa}}+s-\boldsymbol{n}-j_{sa}$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\Big) \wedge$

$n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j^{sa} + \boldsymbol{l_{sa}} - j_{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\left(n_{is}=n_i\right.}^{(n_i+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{(\ )}\sum_{}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\quad-s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\quad_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\quad+1\wedge$$

$$j_{sa}^{ik}\leq\quad\leq j^{sa}+j_{sa}^{ik}-\quad a\wedge$$

$$j_{ik}+j_{sa}-\quad\leq j^{sa}\leq\quad+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}\quad s\quad+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$D+j_{sa}^{ik}-\quad<\boldsymbol{l_{ik}}\leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1\big)\vee$$

$$(D\quad<n\wedge\boldsymbol{l}\neq\quad_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$$

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$$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$$

$$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{j_z \supset j_{ik}, j} \sum_{\boldsymbol{l}=\boldsymbol{l}\,(j_{ik}=j-j_{sa}^{ik}-j_{sa})}^{(\ \ )} \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}^{}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{}^{}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\ \ )!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+\ \ j_{sa}^{}-2\cdot j_{ik}-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\ \ -\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{}^{}-j_{ik}-\ \ \right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\ \ \boldsymbol{l_i})!}{(D+j^{sa}+\ \ \boldsymbol{n}-\boldsymbol{l_i}-j_{}^{}\ \ )!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{s}}$ $D+j_{sa}-\boldsymbol{n}$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-$

$j_{ik}+j_{}^{}-j_{sa}^{ik}+$ $j^{sa} \leq \boldsymbol{n}+j_{sa}$ $\wedge$

$\boldsymbol{l}$ $-j_{sa}^{ik}+$ $\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}$ $j_{sa}^{ik}-j_{sa} \geqslant \boldsymbol{l_{ik}} \wedge$

$D \geqslant \boldsymbol{n} < n \wedge I =$ $0 \wedge$

j_{sa} $\leq j_{sa}$ $1 \wedge j_{sa}^{ik} < j_{s}$ $-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{i}\right.$ $\mathbb{k}_2$ $\left., \cdots, j_{sa}^{i}\right\} \wedge$

s $\leq s \wedge$ $s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2$ $\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\ \ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}\right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{i}\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik})}^{\boldsymbol{l_{sa}}-\boldsymbol{i}\boldsymbol{l}+1} \sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot(j^{sa}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{i}\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!\cdot\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})!\cdot(\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \leq D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_{sa}} = \sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{\boldsymbol{l_{sa}}-{}_{\boldsymbol{i}}\boldsymbol{l}+1} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)!\cdot(n_i - n_{ik} - j_{ik} + 1)!}\cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)!\cdot(n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)!\cdot(\boldsymbol{n} - j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1\right)!\cdot\left(j_{ik} - j_{sa}^{ik} - 1\right)!}\cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})!\cdot(\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!\cdot\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - \quad - 2\cdot j_{sa}\right)} \cdot$$

$$\frac{(D - \boldsymbol{l_i}}{(D + s - \boldsymbol{n}\ \ )!\ \ \boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa} = j_{sa} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{sa}}-\ _{\boldsymbol{i}}\boldsymbol{l}+1} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)!\cdot(n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)!\cdot(n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)!\cdot(\boldsymbol{n} - j^{sa})!} \cdot$$

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$$\frac{(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} -$$

$$\sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(\ )}{(D - s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - j_{sa}^{ik} < j_{s} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, j_{sa}, \cdots,$

$s \geq 5 \wedge = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_1 + \Rightarrow$

$$fzS_{j_{ik},j^{sa}} = \sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{ik}}+j_{sa}-{}_{\boldsymbol{i}}\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - {}_{i}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{i}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right.} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!}$$

$$\sum_{k=} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - \cdots - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} - 2 \cdot j^{sa} + 2 \cdot j_{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{sa}^{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq n + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} - j_{sa} + j_{sa}^{ik} \Rightarrow \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} \wedge I = \mathbb{k} > \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - {}_{i}\boldsymbol{l} - j_{sa} + 1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}$$

$$\frac{\left(\boldsymbol{l_{ik}}\quad_{\boldsymbol{i}}\boldsymbol{l}-j_{sa}^{\quad}\right)}{\left(\boldsymbol{l_{ik}}-j_{ik}-\ _{\boldsymbol{i}}\boldsymbol{l}+\quad\right)\cdot\left(j_{ik}-j_{sa}^{ik}\quad\right)!}\cdot$$

$$\frac{j_{sa}-\boldsymbol{l}_{\boldsymbol{j}}\quad-s)!}{(D+\quad-\boldsymbol{n}\quad)!\quad-s)!}\ -$$

$$\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )}\ \sum_{(j_{ik}=j_{sa}^{ik})}\ \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\quad\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}\ \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+2\cdot j\quad+2\cdot j_{sa}^{ik}-\quad\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(\quad-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\left(\boldsymbol{n}\quad\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}\quad n\wedge\boldsymbol{l}=\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\quad\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq\quad+j_{sa}^{ik}-\quad a\wedge$

$j_{i\quad}-j_{sa}\quad j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\quad>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$

$D\quad<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}}-\ {}_{i}\boldsymbol{l}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - \mathbb{k}_1 - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - \boldsymbol{n} - 1)!}{(n_{sa} - \boldsymbol{n} - j^{sa})! \cdot (j^{sa} - 1)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D - j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} -
$$

$$
\sum_{k=\ {}_{i}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}
$$

$D \geq \boldsymbol{n} < \wedge \boldsymbol{l} = \ {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \leq D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$
\begin{aligned}
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\ {}_{i}\boldsymbol{l}-j_{sa}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{} \\
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}+1)}^{(n_i-j_{ik}-1)} \sum_{=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-} \\
\frac{(n_i - n_{ik}}{\ldots - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot \\
\frac{(n_{ik} - \ldots - \mathbb{k}_2 - 1)!}{(j^{sa} - \ldots - 1)! \cdot (n_{ik} \ldots j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \\
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot \\
\frac{\left(\boldsymbol{l_{ik}} - \ {}_{i}\boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \ {}_{i}\boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot \\
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} - \\
\sum_{k=\ {}_{i}\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik})}^{(\ )} \sum_{j^{sa}=j_{sa}} \\
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \\
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot \\
\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}
\end{aligned}
$$

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$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{s}^{i}\}$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{sa}} - {}_{\boldsymbol{i}}\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=j_{s}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}\sum_{n_{sa}=}^{\ -j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{s}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\ )!}{(D-s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ _{i}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D+j_{sa}-\ \wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}<\ +j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-\ _{sa}>\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\ >0\wedge$

$j_{\ }\leq j_{sa}^{i}-\ \ j_{sa}^{ik}<j_{s}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\cdots,\ \ j_{sa},\cdots,\ \ \right\}$

$s\geq5\wedge\ =s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\ =\mathbb{k}_1+\ \Rightarrow$

$$_{fz}S_{\,j_{ik},j^{sa}}=\left(\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{ik}}+j_{sa}-\ _{i}\boldsymbol{l}-j_{sa}^{ik}+1}\right.$$

$$\left.\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\right)$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-{}_{i}\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right.}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(-s)!}\right)\cdot$$

$$\left(\sum_{k=\ {}_{i}\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\ \sum_{(j_{ik}=j_{sa}^{ik})}\ \sum_{j^{sa}=j_{sa}+1}^{-{}_{i}\boldsymbol{l}+j_{sa}^{ik}+1}\right.$$

$$\left.\sum_{n_i=\boldsymbol{n}+}^{n}\ \sum_{=\boldsymbol{n}+\mathbb{k}_2}^{j_{ik}}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}-j^{sa}-\mathbb{k}_2}\right.$$

$$\frac{(n_i-1)!}{(j_{ik}-\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-\ -1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-{}_{i}\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}+1\right)}\ \sum_{(j_{ik}=j_{sa}^{ik})}\ \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-{}_{i}\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j$$

$$\frac{\left(\boldsymbol{l_{ik}} - {}_{i}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{i}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j - \boldsymbol{l_{sa}} - j}{(D + j^{sa} - \boldsymbol{n} -)! \cdot (j_{sa} - j_{sa} - s)!}\Bigg) -$$

$$\sum_{k=\ (j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_{i}+\mathbb{k}\,(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{n} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{- \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \quad < n \wedge \boldsymbol{l} = \ {}_{i}\boldsymbol{l} \ \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \quad j^{sa} + j_{sa}^{ik} - \quad - 1 \wedge$

$j_{ik} + \quad - j_{sa}^{ik} + \quad \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \quad > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\quad \boldsymbol{n} \quad \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}} -\ {}_{i}\boldsymbol{l}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \ {}_{i}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \ {}_{i}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} \right) +
$$

$$
\left(\sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}} -\ {}_{i}\boldsymbol{l}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}} -\ {}_{i}\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \ {}_{i}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \ {}_{i}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)-$$

$$\sum_{k={}_{i}\boldsymbol{l}}\ \sum_{(j_{ik}=j_{sa}^{ik})}^{(\ )}\ \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}\ \sum_{n_{sa}=n_{ik}\ldots}^{\ldots-\mathbb{k}_2}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}\ldots{}^{ik}-2\cdot j_{ik}\ldots s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\ldots)}{(D\ldots-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}={}_{i}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\ldots$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}\ldots{}_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}\ldots{}_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l}\ldots j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$D\geq\boldsymbol{n}<n\wedge\ldots=\mathbb{k}>\ldots$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}\ldots j_{sa}-1\ldots j^{s}\ldots j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\ldots,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{s}\ldots\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 5\wedge\boldsymbol{s}=\ldots\mathbb{k}\wedge$

$\mathbb{k}_{\ldots}=\ldots\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$${}_{fz}S_{j_{ik},j^{sa}}=\sum_{k={}_{i}\boldsymbol{l}}\ \sum_{(j_{ik}=j_{sa}^{ik})}^{(\ )}\ \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!}$$

$$\sum_{l\,(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}} \sum$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(\quad=n_i-j_{ik}+1)\ n_{sa}=n_{ik}} \sum_{j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} \quad - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\quad + 2 \cdot j^{sa} + 2 \cdot \quad - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{\quad + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq \quad - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq \quad \leq j^{sa} + j \quad - j_{sa} \wedge$

$j \quad + j_{sa} - j_{sa} \quad \leq j^{sa} \leq \quad + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} \quad j_{sa}^{ik} + 1 = \boldsymbol{l_s} \quad + j_{sa}^{ik} \quad > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D \quad j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \quad D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \quad \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \quad j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 5 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S}_{j_{ik}} \sum_{k=\ \boldsymbol{i}\boldsymbol{l}\ (} \sum_{} \sum_{} \sum_{j_{sa}=j_{sa}} \boldsymbol{l_{sa}} - \boldsymbol{i}\boldsymbol{l}+$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}} \sum_{-j_{ik}+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1} (n_i - j_{ik} - 1) \quad n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2$$

$$\frac{(n_i - n_{ik} - 1)!}{\quad)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\ \boldsymbol{i}\boldsymbol{l}\ (} \sum_{(j_{ik}=j_{sa}^{ik})}^{(\ )} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}\big) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa}\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa} \leq j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s} \cdots, \mathbb{k}, j_{sa}^{ik}, \cdots, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \wedge$

$\mathbb{k}_z: 2 \cdots 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})} \sum_{j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D}^{\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1} \right.$$

$$\left. \sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \right)$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\ \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}-}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{sa}^{ik}-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right.} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - \right. - j_{sa})!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\quad + j_{sa} - j^{sa} \quad)!}\Bigg) -$$

$$\sum_{k} \binom{\quad}{(j_{ik} = j^{sa} + \quad - j_{sa})} \sum_{j^{sa} \quad} \binom{\quad}{j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1} \quad -D-s$$

$$\sum_{\quad = \boldsymbol{n} + \mathbb{k}} \binom{n_i - j_s + 1}{(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik})}$$

$$\sum_{\quad = n_{is} + j_{sa}^{s} - j_{sa}^{ik} - \mathbb{k}_1} \binom{\quad}{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}$$

$$\frac{\left(n_i + \quad ^{sa} + 2 \quad _{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$(D > \quad n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 2 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

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$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$$

$$D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 2 \leq \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}})) \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$$

$$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{z=2,\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2,j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+} \sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{i}^{}}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}^{}-\mathbb{k}_{}-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-)!}\cdot$$

$$\frac{1}{(+2\cdot j^{sa}+ j_{sa}^{}- j_{ik}- -2\cdot j_{sa})!}\cdot$$

$$\frac{(-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{}-j_{ik}-\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!\right.}\cdot$$

$$\frac{(D-_i)!}{(+j^{sa}+\boldsymbol{n}-\boldsymbol{l_i}-j!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{} + j_{sa} - j_{sa}^{} + 1 \leq j^{} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge + j_{sa}^{ik} > \boldsymbol{l_{ik}}\big) \vee$

$\big(D \geq \boldsymbol{n} \wedge \boldsymbol{l_s} > D - + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}}\big)\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{s}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}} \sum_{n_{sa}=\boldsymbol{n}} \quad \begin{matrix} (n_i-j_{ik}-\mathbb{k}_1+1) \\ {}^{sa}+1 \end{matrix} \quad \begin{matrix} n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \\ \end{matrix}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(j_{sa}^{ik} - \boldsymbol{l} - j_{sa}^{ik})!}{(j_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\left. \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \right) \cdot
$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{\left(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}\right)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{ik}=n_i-j_{ik}+\mathbb{k}_2-j_{ik}+1\right)}^{(n_i-j_{ik}+\mathbb{k}_2+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_2)!}{(j_{ik} - \mathbb{k}_2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

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$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1$ $-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa}\right.$ $\cdots,j_{sa}^{i}\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z\geq 2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\left.\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\right).$$

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$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\boldsymbol{l} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-\boldsymbol{l}-1)}^{\boldsymbol{l_{sa}}+\boldsymbol{n}-\boldsymbol{l}+1}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2+j_{sa}^{ik}-j_{ik}+1)}^{(n_i-j_{ik}+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_i+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum^{(\ )}_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right.!}$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(}$$

$$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+2\leq\boldsymbol{l}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j^{ik}\ldots j_{sa}>\ldots\wedge$$

$$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$$

$$j_{sa}\leq j_{sa}^{i}-1\wedge j_{ik}<j_{sa}-1\wedge j_{sa}<j_{sa}^{ik}-1$$

$$\boldsymbol{s}:\left\{j_{sa}^{s}\ldots,\mathbb{k}\ldots j_{sa}^{ik},\cdots,\ldots j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$$

$$s\geq 6\wedge\boldsymbol{s}=s+\ldots\wedge$$

$$\mathbb{k}_z:2\ldots2\wedge\mathbb{k}=\mathbb{k}_1+\ldots\Rightarrow$$

$${}_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\ \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-}\sum_{=j_{ik}+j_{sa}-j_{sa}}$$

$$\sum_{n_i}\sum_{+\mathbb{k}}^{(j_s+1)}\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)$$

$$\sum_{n_i}\sum_{m_{is}+j_{sa}^{s}-j_{s}^{ik}}^{(\ )}\sum_{\mathbb{k}_1}^{(\ )}\left(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)$$

$$\frac{\left(n_i+2\cdot j^{sa}+\ j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{\left(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2\right)!}\cdot$$

$$\frac{1}{\left(2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{l} \leq n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D - \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa} - \quad \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=j_{sa}-j_{sa}^{ik}}^{\qquad} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - \quad i_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(\quad - n_{sa} \quad_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (\quad_{ik} + j_{ik} \quad n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(\quad j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{\left(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}\right)}^{\boldsymbol{l_s}+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_{ik}+1)}\sum_{n_{ik}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-n_{sa}-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\sum_{\left(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)}^{(\ )}$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, j_{sa}\right.$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1} \sum_{j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D}^{n} \sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}}^{(\ )}\sum_{n_{sa}=n_{ik}+j_{ik}-j_{sa}+\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)}{(n_i-\boldsymbol{n}-\mathbb{k}_1)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}-2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{sa}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_i})!}{(D+j^{sa}+\boldsymbol{n}-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{sa}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j_{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1\geq\boldsymbol{l_s}\wedge\boldsymbol{l_{ik}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\mathbb{k}>0\wedge$

$j_{sa}\geq j_{sa}^{s}-1\wedge j_{sa}^{s}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}$$

$$\frac{(\boldsymbol{l}_{\quad}-\boldsymbol{l}-j_{sa})}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+\quad)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\quad\quad-\boldsymbol{l}_{sa}-s}{(\quad-j^{sa}-\boldsymbol{n}-\quad)!\cdot(\quad\quad-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}\quad-j_{sa})}^{\boldsymbol{l}_s+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l}_i+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

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$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$
\begin{aligned}
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{\left(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-\cdots-j_{sa}\right)} \sum_{j^{sa}=j_{ik}+\cdots-j_{sa}^{ik}} \\
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{ik}=\cdots-\mathbb{k}_2-j_{ik}+\cdots\right)} \sum_{j^{sa}+1}^{(n_i-j_{ik}-\mathbb{k}_1+1)\cdots n_{ik}+j_{ik}-j^{sa}-\mathbb{k}} \\
\frac{(n_i-n_{\cdots}-\mathbb{k}_1-1)!}{(j_{ik}-2)\cdots(n_i-n_{\cdots}-j_{ik}-\mathbb{k}_1+1)!} \cdot \\
\frac{(n_{ik}-n_{s\cdots}-\mathbb{k}_2-1)!}{\cdots-j_{ik}-1)!\cdot(n_{ik}\cdots j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!} \cdot \\
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!} \cdot \\
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!} \cdot \\
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!} - \\
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \\
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_s+1)} \\
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
\end{aligned}
$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \geq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, j_{sa}\right.$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{\boldsymbol{n}} S_{j_{ik}, j^{sa}} = \sum_{k=\boldsymbol{l}}^{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l} - j_{sa} + 1\right)} \sum_{\left(j_{ik} = \boldsymbol{l_{ik}} + \boldsymbol{n} - D\right)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{\left(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1\right)}^{\left(n_i - j_{ik} - \mathbb{k}_1 + 1\right)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)}\sum_{sa=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot\right.-s-2\cdot\left.-\mathbb{k}_1-\mathbb{k}_2\right)}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{sa}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}-\boldsymbol{l_i})!}{(D+j^{sa}+\boldsymbol{n}-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}$ $D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j$ $\leq j^{sa}+$ $-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq$ $^{sa}\leq\boldsymbol{n}+$ $-$

$\boldsymbol{l_{ik}}-j$ $+1=\boldsymbol{l_s}\wedge\boldsymbol{l_s}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n$ $=\mathbb{k}>$ $\wedge$

j_{sa} $-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}$ $j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{i}^{}}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}^{}-\mathbb{k}_{}-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-)!}\cdot$$

$$\frac{1}{(+2\cdot j^{sa}+ j_{sa}^{}-j_{ik}-2\cdot j_{sa})!}\cdot$$

$$\frac{(-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{}-j_{ik}-\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!\right.}\cdot$$

$$\frac{(D-_i)!}{(+j^{sa}+\boldsymbol{n}-\boldsymbol{l_i}-j!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}-1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j_{} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l}_{}-j_{sa}^{ik}+1 \leq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}-j_{sa}^{ik}-j_{sa} \geq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{}\geq 0 \wedge$

$j_{sa} \leq j_{sa}-1 \wedge j_{sa}^{ik} < j_{s}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik} \cdots \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j_{ik}-\boldsymbol{l}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\ \ )!}\cdot$$

$$\frac{1}{(n+2\cdot j^{sa}+\ \ j_{sa}-2\cdot j_{ik}-2\cdot j_{sa})!}\cdot$$

$$\frac{(\ \ -\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{}^{}-j_{ik}-\ \ !\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+j_{}^{}-\boldsymbol{n}-\boldsymbol{l_i}-j_{}^{}\ \ !\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D -\ \ +1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j_{}^{} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1\ \ \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}\ \ _{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}) \vee$

$(D\ \ \boldsymbol{n}<n \wedge \boldsymbol{l_s}\ \ -\boldsymbol{n}+$

$_{sa}^{ik}+1\ \ j_{ik} \leq j^{sa}+j_{}^{}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}\ \ j^{sa}\ \ +j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n}<\ \ \wedge \boldsymbol{l_s}>D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\Big) \wedge$

$D \geq \boldsymbol{n}<n \wedge I=\mathbb{k}>0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

$$
\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}})\vee$

$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}})\big)\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}_1>0\wedge$

$j_{sa}^{s}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}^{s}-1\wedge j_{sa}^{s}\leq j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{ik},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,j_{sa},\cdots,j_{sa}\}\wedge$

$s\geq 6\wedge s=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_2\Rightarrow$

$$fzS_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_{sa} - s)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}})!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{\mathbb{k}_1=0}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(j_{ik} = \boldsymbol{l_i} + j_{sa}^{ik} - D - s)}^{} \sum_{\mathbb{k}_2=0}^{j_{sa} - j_{sa}^{ik}}$$

$$\sum_{(n_{is} = \boldsymbol{n} + \mathbb{k})}^{(n_i - j_s + 1)} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik})}$$

$$\sum_{(n_{ik} = n_{is} + j_{sa}^{s} - j_{sa}^{ik} - \mathbb{k}_1)} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + \boldsymbol{n} + j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

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$j_{sa}^{ik}+1 \le j_{ik} \le j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}}\big) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 6 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-1)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{sa}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-
$$

$$
\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}
$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa}\right)!}$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)!\cdot\left(j_{ik} - j_{sa}^{ik} - 1\right)!}\cdot$$

$$\frac{(D - \boldsymbol{l_i}}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})!\cdot(\quad + j_{sa} - j^{sa}\quad)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \quad + j_{sa} - s > \quad) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + \quad \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - \quad \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq \quad ^{sa} \leq \boldsymbol{n} + j_{sa} - \quad \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \quad > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \quad > 0 \wedge$

$j_{sa} \leq j_{sa}^{s} - 1 \wedge j_{sa}^{ik} < j_{sa}^{s} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1 \quad ^{ik}, \cdots, \mathbb{k}_2 \quad sa, \cdots, j_{sa}^{i}\} \wedge$

$s > \quad \wedge \quad = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \quad = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} -} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}})!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{\left(j_{ik}=\boldsymbol{l_i}+\right.}^{\left(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}\right)} \sum_{\left.j_{sa}^{ik}-D-s\right)} \sum_{a-j_{sa}^{ik}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}$$

$$\sum_{k=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i + \right.j^{sa} + 2 \left.\cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$((D \geq \boldsymbol{n} \ \ldots \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$$

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$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}_{\mathbb{k}_2}-j_{ik}+1)}^{(n_i-j_{ik}-1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i \quad n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} \quad (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j \quad - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\quad-j^{sa})!}$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-j_{sa})}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+\quad)!\cdot(j_{ik}-j_{sa}^{ik}\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}\quad\boldsymbol{l}_{\quad}-j_{sa})}{(j_{ik}+\boldsymbol{\quad sa}-j^{sa}-\boldsymbol{l_{ik}}\quad)!\cdot(j^{sa}\quad-j_{sa})!}\cdot$$

$$\frac{(\quad+j_{sa}-\quad-s)!}{\quad+j^{sa}-\boldsymbol{n}-\quad)!\cdot(\boldsymbol{n}\quad_a-j^{sa}-s)!}-$$

$$\sum_{\quad=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\quad)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\left((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge\right.$$

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$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-\cdots-s-1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(\quad-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa}+}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}}{(\quad-j_{ik}-\quad+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}^{ik})!}{(j_{ik}+j_{sa}-j^{sa}-\boldsymbol{l_{ik}})!\,(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D-j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}$ [illegible] $) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ [illegible] $\wedge \boldsymbol{l_i}+$ [illegible] $-s=\boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+$ [illegible] $\leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 >$ [illegible] $\wedge \boldsymbol{l_{sa}}+$ [illegible] $-j_{sa} \leq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}})\big) \wedge$

$D \geq$ [illegible] $< n \wedge I = \mathbb{k} >$ [illegible] $\wedge$

$j_{sa} \leq j_{sa}^{i}$ [illegible] $\wedge j_{sa}^{ik} < j_{sa}$ [illegible] $-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j$ [illegible] $\mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} \ni$ [illegible] $+\mathbb{k} \wedge$

[illegible] $\wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}+\mathbb{k}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+\boldsymbol{n}-D)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

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$$\sum_{\boldsymbol{k}=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\ )!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+\ j_{sa}-2\cdot j_{ik}-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\ -\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{}^{}-j_{ik}-\ \right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+j_{}^{}-\boldsymbol{n}-\boldsymbol{l_i}-j_{}^{})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\left((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\ +1 \wedge\right.$$

$$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}}) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+$$

$$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}}) \vee$$

$$(D \geq \boldsymbol{n} < \ \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$$

$$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}}) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$$

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$j_{sa}^{ik}+1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le \boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\big)\wedge$

$D\ge \boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\le j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\ge 6\wedge \boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z: z=2\wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$
{}_{fz}S_{j_{ik}\cdots j_{sa}}=\sum_{\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}_{\mathbb{k}_2}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-1)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{sa}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

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1110 $D > \boldsymbol{n} < n$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (- j^{sa})!}$$

$$\frac{(\boldsymbol{l}_{\boldsymbol{s}} - \boldsymbol{l} - j_{sa})}{(\boldsymbol{l}_{\boldsymbol{ik}} - j_{ik} - \boldsymbol{l} + \cdot (j_{ik} - j_{sa}^{ik}$$

$$\frac{(\boldsymbol{l}_{\boldsymbol{sa}} - \boldsymbol{l} - j_{sa})}{(j_{ik} + \boldsymbol{sa} - j^{sa} - \boldsymbol{l}_{\boldsymbol{ik}} \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(+ j_{sa} - - s)!}{ + j^{sa} - \boldsymbol{n} -)! \cdot (\boldsymbol{n} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l}_s+j_{sa}-\boldsymbol{l})} \sum_{(j_{ik}-\boldsymbol{l}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l}_{\boldsymbol{s}} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l}_{\boldsymbol{s}} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l}_{\boldsymbol{i}})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l}_{\boldsymbol{i}} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l}_{\boldsymbol{s}} > D - \boldsymbol{n} + 1 \wedge$

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$j_{sa}^{ik}+1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le \boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\ge\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\le j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\ge 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}^{\boldsymbol{l_s}+j_{sa}-D-1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_2-j_{ik}+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-j_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{i}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum^{(\ )}_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right.}$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l}_{\boldsymbol{i}}}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-j^{sa}\quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \quad+j_{sa}-s>$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}<j_{sa}-$ $\wedge j_{sa}^{s}<j_{sa}^{ik}-$

$\boldsymbol{s}: \{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik}\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{s}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s}=$ $+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\ \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}$$

$$\sum_{n_{ik}=n_{is}+}$$

$$\frac{\left(n_i+2\cdot j^{sa}+\right.\cdot j_{sa}^{ik}-2\cdot j_{ik}$$

$$\frac{1}{\left(\boldsymbol{n}+\right.\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}$ $\wedge\boldsymbol{l_s}>D-$ $+1\wedge$

$j_{sa}^{ik}+1\leq j_{ik}$ $j^{sa}+$ $-j_{sa}\wedge$

j_{ik} j_{sa} $j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+$ $>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - \quad !}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \quad \mathbb{k}_1 + 1)!}
$$

$$
\frac{(n_{ik} - n_{sa} \quad \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} \quad)!} \cdot
$$

$$
\frac{(n_{sa} \quad)!}{(n_{sa} \quad j^{sa} \quad 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} \quad \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - \quad \boldsymbol{l} + 1 \quad (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} \quad \boldsymbol{l_{sa}} - s)!}{(D + j \quad \boldsymbol{n} - \boldsymbol{l_{sa}}) \quad (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

$$
\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik}+1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_{ik},} = \sum_{k=\boldsymbol{l}}^{j_{sa}^{ik}-\boldsymbol{l}-s} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}-j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - \cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s} - 1)!}{\left(\boldsymbol{l_s} + j_{ik} - j_{ik} - \boldsymbol{l}\right)!\,(j_{ik} - j_{sa}^{ik} - 1)!}\cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D - j^{sa} + s - \boldsymbol{l_i} - j_{sa})!\cdot(\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} + 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}})\big) \wedge$

$D \geq \boldsymbol{n} < n \wedge \mathbb{k} > \wedge$

$j_{sa} \geq j_{sa}^{ik} + 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\boldsymbol{l})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{(\ \ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=\right.}^{(n_i+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{(\ \ )} \sum_{-n_{ik}}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + \quad - s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \quad > D - \quad + 1 \wedge$

$j_{sa}^{ik} + \quad \leq j_{ik} \leq j^{sa} + \quad - j_{sa} \wedge$

$j_{ik} + j_{sa} - \quad \leq j^{sa} \leq \quad + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - \quad + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}) \vee$

$(D \geq \boldsymbol{n} < \quad \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$\quad + 1 \quad \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\right.}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D}\sum_{j^{sa}=j_{ik}+j_{sa}-j_s}$$

$$\sum_{n_i+\mathbb{k}}^{(j_s+1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{n_{is}+j_{sa}^{s}-j_{sa}^{ik}}^{(\ )}\sum_{\mathbb{k}_1}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{n_i+2\cdot j^{sa}+\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\quad 2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D > \quad m \wedge \boldsymbol{l} \neq \quad \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq \quad + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} \quad - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-} \sum_{j^{sa}=j_{sa}+1}^{}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-}^{(n_i-j_{ik}-\mathbb{k}_1} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i} \cdot
$$

$$
\frac{- n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot n_{ik} + j_{ik}} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} \boldsymbol{sa} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}^{}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\ \sum_{(j_{ik}=j^{sa}\ \ -j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\ \sum_{j^{sa}=j_{sa}}^{}$$

$$\sum_{}^{-j_s+1)}$$

$$\sum_{n_{}+\mathbb{k}\,(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{n_{is}+j_{sa}^{s}-j_{sa}^{ik}\ \mathbb{k}_1}^{(\ )}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{n_i+2\cdot j^{sa}+\ \cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\ \ 2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\ \ m\wedge \boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge \boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq\ ^{a}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}\ \ -j_{sa}^{ik}+1\leq j^{sa}\leq \boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D\geq \boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ \ )} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik})}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=j_{sa}+2}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\left. \frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot \right.
$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \qquad \sum^{\boldsymbol{l_{sa}} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \qquad \sum^{(n_i - j_{ik}} \qquad \sum^{n_{ik} + j_{ik}} \qquad \mathbb{k}_2$$

$$\frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_{ik} - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - \quad a - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{(\quad)} \qquad \sum_{j^{sa} = j_{sa} + 1}^{\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \qquad \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{s} - j_{sa}^{ik} - \mathbb{k}_1} \qquad \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)}$$

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$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa}\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z\geq 2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}} \sum_{j^{sa}=j_{sa}+2}^{}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - n_{ik} - \mathbb{k}_1 + 1)!}$$

$$\frac{(n_{ik} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\boldsymbol{l} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{-}-s)!}\Bigg)\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=j_{sa}^{ik}+}\sum_{=j_{ik}+j_{sa}-j_{sa}^{}}$$

$$\sum_{n_i}\sum_{\mathbb{k}}^{(\quad j_s+1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{n_{i}}\sum_{\mathbb{k}_1}^{(\quad)}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+\quad j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{\quad i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\quad\boldsymbol{n}\quad\wedge\boldsymbol{l}\neq\quad_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_{sa}}\leq D+j_{sa}-\boldsymbol{n}\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq\quad a+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{s}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}} \sum_{} \quad \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{\left(j_{ik}=j_{sa}^{ik}+1\right)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum^{(n_i-\quad+1)}\left(n_{is}=\quad-j_{ik}\right)$$

$$\sum\sum^{(\quad)}_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1\quad-n_{ik}\quad-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}\quad 2\cdot j_{ik}-\quad-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}\quad\mathbb{k}_1-\mathbb{k}_2}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+\quad j^{sa}+2\cdot j_{s}^{\quad}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\quad s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\quad\boldsymbol{l}\wedge\boldsymbol{l_s}\quad D-\boldsymbol{n}\quad\wedge$

$j_{sa}^{ik}\quad\leq j^{sa}+j_{sa}^{ik}\quad j_{sa}-1\wedge$

$j_{ik}+j_{sa}\quad+1\leq j^{s}\quad\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}\quad+1=\boldsymbol{l_s}\quad\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$\boldsymbol{l_{sa}}\leq D+\quad-\boldsymbol{n}\wedge$

$\quad>\boldsymbol{n}\quad\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{l_{sa}} - s)! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\left. \frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot \right.
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=j_{sa}^{ik}+1)}\sum_{j^{sa}=\cdots+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\cdots-j_{ik})}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-\cdots-\mathbb{k}_1}\sum_{\cdots-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-\cdots-2\cdot j_{ik}-\cdots-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\cdots-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+\cdots+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\cdots-s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\cdots\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}\cdots1\wedge$

$j_{sa}^{ik}\leq\cdots\leq j^{sa}+j_{sa}^{ik}\cdots_{sa}\wedge$

$j_{ik}+j_{sa}-\cdots^{ik}\leq j^{sa}\leq\cdots+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}\cdots+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$\boldsymbol{l_{sa}}\leq D+\cdots-\boldsymbol{n}\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$\cdots\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - \quad}{(j_{ik}-2)! \cdot (n_i - n_{\quad} - j_{ik} - \quad + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} \quad \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} \quad n_{sa} - j^{sa} - \quad)!} \cdot
$$

$$
\frac{(n_{sa} - \quad)!}{(n_{sa} \quad {}^{sa} - \quad 1) \quad \boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} \quad \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j \quad - \boldsymbol{l} + 1) \quad (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} \quad \boldsymbol{l_{ik}} - j_{sa})!}{(\quad \boldsymbol{l_{sa}} - \quad - \boldsymbol{l_{ik}}) \quad (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j \quad - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

$$
\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$2 \leq \boldsymbol{l} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\colon \left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z\colon z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2$

$$j^{\left(\boldsymbol{l_{ik}},j^{sa}\right.}\left(\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

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$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(j_{ik}+j^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{ik}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik}+1}\sum_{\boldsymbol{l}+\boldsymbol{n}+j_{sa}-D-s}^{(n_i-j_s+}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}^{}\sum_{(n_{is}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{}\sum_{(n_i+n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{}$$

$$\frac{(n_i+2\cdot j^{sa}+\boldsymbol{l}_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(\boldsymbol{n}-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\boldsymbol{n}+j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l}_{\boldsymbol{ik}}+j_{sa}-\boldsymbol{l}_{\boldsymbol{sa}}-j_{sa}^{ik}+2 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-1 \wedge$

$\boldsymbol{n}+j_{sa}-j_{sa}^{ik}+1 \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}} \leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}<j_{sa}-1 \wedge j_{sa}^{s}<j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}}^{n_{ik}-j^{sa}-\mathbb{k}_2} {}^{sa}+1}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} - j^{sa} - \boldsymbol{n} + 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(j_{sa} - \boldsymbol{l} - j_{sa}^{ik})!}{(j_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

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$$\frac{1}{(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}$$

$D\geq \boldsymbol{n}<n\wedge \boldsymbol{l}\neq {}_{\boldsymbol{i}}\boldsymbol{l}\wedge \boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$2\leq \boldsymbol{l}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq \boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_i}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik}\wedge$

$D\geq \boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{s}$ $,j_{sa}^{i}\right\}\wedge$

$s\geq 6\wedge \boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z: z=2\wedge \mathbb{k}=$ $+\mathbb{k}_2\Rightarrow$

$$S_{j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\left.\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot\right)$$

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$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\boldsymbol{l} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)\cdot$$

$$\sum_{k=\boldsymbol{l}}^{\quad}\sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{(\ )}\sum_{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-}^{\quad}$$

$$\sum_{\quad}^{\quad}\sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{\quad}$$

$$\sum_{\quad}^{\quad}\sum_{\left(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)}^{(\ )}$$

$$\frac{n_i+2\cdot j^{sa}+\cdots-j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{\cdots-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\cdots(2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\cdots\boldsymbol{l}\cdots\boldsymbol{n}\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_{ik}}+\cdots-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+2\leq\boldsymbol{l}\leq\ _{\boldsymbol{i}}\boldsymbol{l}-1\wedge$

$j_{sa}-j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik}\wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=\boldsymbol{l_{sa}}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_{ik}+1)} \sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{(\ )}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_2 + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right.} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$2 \leq \boldsymbol{l} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}} - j_{sa}^{ik} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - \wedge j_{sa}^{s} < j_{sa}^{ik} - \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}\right\} \wedge$

$s \geq 0 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z.z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$fz S_{j_{ik}, j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} + 1)} \sum_{\left(j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa}\right)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \right.$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\left. \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot \right)$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)}\sum_{(j_{ik}=j_{sa}^{ik}+}\sum_{j^{sa}=}^{\boldsymbol{a}-\boldsymbol{l}+1}\right.$$

$$\left.\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\right.$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-\mathbb{k}_2-1)!}{(j^{sa}-1)!\cdot(n_{ik}-j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right)}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\quad-j_{sa}\right)!}$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\quad+j_{sa}-j^{sa}\quad)!}\Bigg)-$$

$$\sum_{(j_{ik}=\boldsymbol{l_i}+\quad}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\ \sum_{\quad}^{\quad}\quad{}_{sa}^{ik}-D-s)\ j\quad\quad a-j_{sa}^{ik}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{\quad}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i+\quad{}^{sa}+2\quad{}_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\boldsymbol{\quad>n}\ \wedge\ \boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{\,j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{} \sum_{(j_{ik}=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{sa} + j^{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\left. \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \right.
$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\ \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-j_{sa})}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}_{ik}-j_{ik}-\mathbb{k}_1)}^{n_i-j_{ik}-\mathbb{k}_1}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-1)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\ \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{\left(\boldsymbol{l_s}+j_{ik}-j_{ik}-\boldsymbol{l}\right)!\,(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j^{sa}+s-\boldsymbol{l_i}-j_{sa})\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}-j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \quad > 0 \wedge$

$j_{sa} \leq j_{sa}^{t} - \quad j_{sa}^{ik} < j_{sa}^{t} - 1 \wedge j_{sa}^{s} < j_{sa}^{t} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \quad \mathbb{k}_2, j_{sa}, \quad j_{sa}^{t}\} \wedge$

$s \geq 6 \wedge \quad = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \quad = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right)}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-{}^{sa}-s)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l}_s+j_{sa}^{ik}} \sum_{(j_{ik}=j_{sa}^{ik}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_s}$$

$$-j_s+1)$$

$$\sum_{+\mathbb{k}\,(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}$$

$$\sum_{=n_{is}+j_{sa}^{s}-j_{sa}^{ik}\,\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{n_i+2\cdot j^{sa}+\cdot j_{sa}^{ik}-\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\boldsymbol{n}\ 2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \quad n \wedge \boldsymbol{l} \neq \quad \boldsymbol{i} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq \quad + j_{sa}^{ik}-j_{sa} \wedge$

$\quad - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \leq D+j_{sa}^{ik}-\boldsymbol{n} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l} - j_{sa} + 1)} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa}}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}
$$

$$
\frac{(n_{ik} - \mathbb{k}_2 - 1)!}{(j_{ik} - 2)! \cdot (n_i - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(j_{ik} = j_{sa}^{ik} + 1)} \sum_{j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}
$$

$$
\sum_{n_{ik} = n_{is} + j_{sa}^{s} - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

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$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1)\vee$$

$$(D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+\boldsymbol{n}-1)\Big)$$

$$D\geq\boldsymbol{n}<n\wedge I=\geq 0\wedge$$

$$j_{sa}^{i}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}^{ik}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$$

$$\boldsymbol{s}:\{\mathbb{k}_{\boldsymbol{z}},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\ldots\}\wedge$$

$$z\geq 6\wedge=s+\mathbb{k}\wedge$$

$$\mathbb{k}_z\colon z=2\wedge\mathbb{k}\ldots\mathbb{k}_1+\mathbb{k}_2\Rightarrow$$

$${}_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})}\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(j_{ik}-\boldsymbol{l}+1)}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-s+1}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-1)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\boldsymbol{\cdot}\ j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{\left(\boldsymbol{l_s}+j_{ik}-j_{ik}-\boldsymbol{l}\right)!\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j^{sa}+s-\boldsymbol{l_s}-\boldsymbol{l_i}-j_{sa}+\boldsymbol{\cdot}\ (\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((D\geq \boldsymbol{n}<n\wedge \boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge \boldsymbol{l_s}\leq D-\boldsymbol{n}+\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq \boldsymbol{n}\ _{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}\ _{a}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l}\ j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq\ +\boldsymbol{l_s}+s-\boldsymbol{n}-\ )\vee$$

$$(\ \geq \boldsymbol{n}<n\ \neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\ \leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\ j_{ik}\leq j^{sa}+j_{s}\ -j_{sa}\wedge$$

$$j_{ik}+j_{sa}\ j_{sa}^{ik}\leq j^{sa}\leq\ +j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1\ \boldsymbol{l}\wedge\boldsymbol{l}\ +j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$D\ j_{sa}\ <\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\Big)\wedge$$

$$D\geq\boldsymbol{n}<\ \wedge I=\mathbb{k}>0\wedge$$

$$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$$

$$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$$

$$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$$

$$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\boldsymbol{l}+1)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum^{(n_i\quad+1)}\left(n_{is}\qquad -j_{ik}\right)$$

$$\sum_{n_{ik}=n_{is}+j_{sa}\quad=n_{ik}}^{(\quad)}\left(-j^{sa}-\mathbb{k}_2\right)$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{\left(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2\right)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\quad s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\quad\boldsymbol{l}\wedge\boldsymbol{l_s}\quad D-\boldsymbol{n}\quad\wedge$

$j_{sa}^{ik}\quad\leq j^{sa}+j_{sa}^{ik}\quad j_{sa}\wedge$

$j_{ik}+j_{sa}\quad\leq j^{sa}\leq\quad+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}\quad+1=\quad\boldsymbol{sa}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}\quad\leq\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1\wedge$

$\geq\boldsymbol{n}\quad\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-s)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}\sum_{\left(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}\right)}^{(\ )}\sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum^{(n_i}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}}\sum^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\quad s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\quad\boldsymbol{l}\wedge\boldsymbol{l_s}\quad D-\boldsymbol{n}\quad\wedge$

$j_{sa}^{ik}\quad\leq j^{sa}+j_{sa}^{ik}\quad j_{sa}\wedge$

$j_{ik}+j_{sa}\quad\leq j^{sa}\leq\quad+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}\quad+1=\quad\boldsymbol{sa}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}-\quad\leq\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1\wedge$

$\quad>\boldsymbol{n}<\quad\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\boldsymbol{l})!}{(j_{ik}+\boldsymbol{l}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

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$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=}^{(n_i}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{(\ )}\sum_{(}$$

$$\frac{(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\quad s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\quad\boldsymbol{l}\wedge\boldsymbol{l_s}\quad D-\boldsymbol{n}\quad\wedge$

$j_{sa}^{ik}\leq\quad\leq j^{sa}+j_{sa}^{ik}\quad j_{sa}\wedge$

$j_{ik}+j_{sa}-\quad^{ik}\leq j^{sa}\leq\quad+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-\quad+1=\boldsymbol{l_s}-\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{l_i}\leq D+s\quad\boldsymbol{n}\wedge$

$\quad\boldsymbol{n}\quad\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - \quad)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \quad_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} \quad \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} \quad n_{sa} - j^{sa} - \quad)!} \cdot
$$

$$
\frac{(n_{sa} - \quad)!}{(n_{sa} \quad j^{sa} \quad 1)! \quad \boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} \quad \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j \quad \boldsymbol{l} + 1)! \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} \quad \boldsymbol{l_{sa}} - s)!}{(D + j^{\quad} \quad \boldsymbol{n} - \boldsymbol{l_{sa}})! (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

$$
\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_{sa}}+s-\boldsymbol{n}-j_{sa} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}<j_{sa}-1 \wedge j_{sa}^{s}<j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\colon \left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z\colon z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$S_{j_{ik},j^{sa}} \sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+1}^{}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\quad\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\quad-1)!}{\left(\boldsymbol{l_s}+\quad j_{ik}-\boldsymbol{l}\right)!\,(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j^{sa}+s-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \quad_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}-\quad_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-\quad_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l}-j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge \quad=\mathbb{k}>\quad \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}<j_{sa}-\quad j_{sa}^{s}<j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s},\quad \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}\quad j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s}=\quad+\mathbb{k} \wedge$

$\mathbb{k}_1 \quad \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} -$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}}$$

$$\frac{}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})!$$

$$\sum_{k=}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} +}$$

$$\sum_{}^{}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i - j_s + 1)} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik})}$$

$$\sum_{}^{} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + \quad j^{sa} + 2 \quad {}_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < \quad \wedge \boldsymbol{l} \neq \quad {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{+\mathbb{k}_2-j_{ik}+1}^{(n_i-j_{ik}} \sum_{sa=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}} \sum_{-\mathbb{k}_2}
$$

$$
\frac{(n_{ik} - n_{ik}}{(j_{ik} - 2)! \cdot (n_{ik} - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} \quad sa - \mathbb{k}_2 \quad 1)!}{(j^{sa} \quad ik - 1)! \cdot (n_{ik} \quad j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik}\right)}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

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$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$fz_{\boldsymbol{n}}^{\boldsymbol{l}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}\ \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

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$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}} \sum_{n_{sa}=n_{ik}+j_{ik}-\mathbb{k}_2)}^{(}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot \quad - s - 2 \cdot \quad - \mathbb{k}_1 - \mathbb{k}_2\right)}{(n_i - \boldsymbol{n} - \mathbb{k}_1 \quad)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} \quad 2 \cdot j_{sa}^{ik} - \quad j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j \quad - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\quad \boldsymbol{l_i})!}{(D + j^{sa} + \quad - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \quad _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \quad + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j \quad + j_{sa}^{ik} - \quad \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j \quad \leq \boldsymbol{n} + j \quad - \quad \wedge$

$\boldsymbol{l_{ik}} - j \quad + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s \quad) \vee$

$(D \quad \boldsymbol{n} \quad n \wedge \boldsymbol{l} \neq \quad _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq \quad a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(j^{sa}+j_{sa}^{ik}-j_{sa})\,\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{s}}\sum_{j^{sa}=j_{sa}+1}^{\ \ -\boldsymbol{l}_{a}^{ik}+1}$$

$$\sum_{n_{i}+\mathbb{k}\,(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(\ \ -j_{s}+1)}$$

$$\sum_{n_{i}+m_{is}+j_{sa}^{s}-j_{s}^{ik}+\mathbb{k}_{1}\,(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_{2})}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+\ \ j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{\left(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2\right)!}\cdot$$

$$\frac{1}{\left(2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D+s-\boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

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$j_{sa}^{ik} \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \le D + s - \boldsymbol{n}) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ge 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{-\boldsymbol{l}+1}
$$

$$
\sum_{n_{}}^{n} \sum_{+\mathbb{k}\,(n_{ik}=\boldsymbol{n}}^{} \sum_{-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - \quad \cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s} - \quad - 1)!}{\left(\boldsymbol{l_s} + \quad j_{ik} - \boldsymbol{l}\right)!\ (j_{ik} - j_{sa}^{ik} - 1)!}\cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D - j^{sa} + s - \quad \boldsymbol{l_i} - j_{sa}) \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + \quad \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} \quad _{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} \quad _{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} \quad j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq \quad + \boldsymbol{l_s} + s - \boldsymbol{n} \quad) \vee$

$(\quad \geq \boldsymbol{n} < n \quad \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \quad \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \quad j_{ik} \leq j^{sa} + j_{s} \quad - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad j_{sa}^{ik} \leq j^{sa} \leq \quad + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \quad \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \quad j_{sa} \quad < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < \quad \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})\,\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\boldsymbol{l}\right)!}{(j_{ik}+\boldsymbol{l}-j^{sa}-\boldsymbol{l_{ik}})!\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-j^{sa}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ \ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=}^{(n_i}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{(\ \ )} \sum_{-n_{ik}}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + \quad s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \quad _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \quad + 1 \wedge$

$j_{sa}^{ik} \leq \quad \leq j^{sa} + j_{sa}^{ik} \quad _{sa} \wedge$

$j_{ik} + j_{sa} - \quad ^{ik} \leq j^{sa} \leq \quad + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} \quad _s + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} \quad \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1) \vee$

$(\quad < n \wedge \boldsymbol{l} \neq \quad _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

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$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik})}^{\boldsymbol{l_s}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}}^{D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

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$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - \right)} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - \right. - j_{sa})!}$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} -}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \quad + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{(j_{ik}=\boldsymbol{l_i}+}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{-D-s)}^{} \sum_{a}^{} - j_{sa}^{ik}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{k=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i + \ldots j^{sa} + 2 \ldots {}_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$$\left(D > \boldsymbol{n} \ldots n \wedge \boldsymbol{l} \neq \ {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge\right.$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$$

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$\boldsymbol{l_i} \le D + s - \boldsymbol{n}) \vee$

$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l} \ne \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \le D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_{sa}} \le D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \le D + s - \boldsymbol{n})\big) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ge 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{\cdots}{}_{\cdots}{}^{sa} = \sum_{k=\boldsymbol{l}}^{\cdots} \sum_{(j_{\cdots}}^{j_{sa}+j_{sa}^{ik}-j_{s\cdots}{}^{\cdots}{}_{k}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=j_{sa}+1}^{\cdots}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(\quad - 1)!}{(n_{\quad} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}}}{(\quad - j_{ik} - \quad + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + \quad - \boldsymbol{l_{ik}} \quad)!}{(j_{ik} + \quad - j^{sa} - \boldsymbol{l_{ik}}) \quad (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{s} \quad \boldsymbol{l_{sa}} - s)!}{(D \quad j^{sa} - \boldsymbol{l} \quad \boldsymbol{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},\ldots} = \left(\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}\ldots_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\right.
$$

$$
\sum_{=\boldsymbol{n}+\mathbb{k}}^{\ldots} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_{i}\ldots-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\right)+
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{sa}+2}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\right.
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{ik}}-1)} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\ )!}\cdot$$

$$\frac{1}{(\boldsymbol{n}+2\cdot j^{sa}+\ j_{sa}-2\cdot j_{ik}-2\cdot j_{sa})!}\cdot$$

$$\frac{(\ -\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{}-j_{ik}-\ \right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+\ -\boldsymbol{n}-\boldsymbol{l_i}-j_{}\ )!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{s}}\ D+j_{sa}-\boldsymbol{n}$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\ j^{sa} \leq \boldsymbol{n}+j_{sa}\ \wedge$

$\boldsymbol{l}\ -j_{sa}^{ik}+1\ \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}\ j_{sa}^{ik}-j_{sa} \geqslant \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\ \ 0 \wedge$

$j_{sa} \leq j_{sa}\ -1 \wedge j_{sa}^{ik} < j_{s}\ -1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, \ j_{sa}^{ik} \cdots \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s\ \ 6 \wedge\ \ s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2\ \ \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}\right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{i}^{}}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_{}-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-)!}\cdot$$

$$\frac{1}{(+2\cdot j^{sa}+-j_{sa}^{}-2\cdot j_{sa})!}\cdot$$

$$\frac{(-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{}-j_{ik}-\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!\right.}\cdot$$

$$\frac{(D-)!}{(+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{}!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+-j_{}^{ik} \leq j^{s}\boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\wedge \boldsymbol{l_{sa}}+^{ik}-j_{sa}>\boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_i} \leq +s-\boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} <\wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq \leq j^{sa} j_{sa} \wedge$

$j_{ik}+j_{sa}-^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$-j_{}1>\boldsymbol{l_s} \wedge$

$\boldsymbol{l_{sa}} \leq D+j_{sa}-\boldsymbol{n} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}<j_{sa}-1 \wedge j_{sa}^{s}<j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{s}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}}^{n_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{i} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{i} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} - j_{ik} - n_{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} - j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(j_{sa} - \boldsymbol{l} - j_{sa}^{ik})!}{(j_{ik} - j_{sa}^{ik} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=j_{sa}^{ik}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

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$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_i}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{s}\right.$ $\left.,j_{sa}^{i}\right\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=$ $+\mathbb{k}_2\Rightarrow$

$$f_{\boldsymbol{j_{ik}},j^{sa}}=\left(\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}\sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}\right.$$

$$\left.\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\right)$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) +$$

$$\Bigg(\sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\boldsymbol{l_{sa}} + \boldsymbol{l} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-[illegible]\right)!}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{[illegible]}-s)!}\right)[illegible]$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )}\ \sum_{[illegible]=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-[illegible]}^{[illegible]+j_{sa}}$$

$$\sum_{n_i[illegible]+\Bbbk}\ \sum_{(n_{is}=\boldsymbol{n}+\Bbbk+j_{sa}^{ik}-j_{ik})}^{[illegible]-j_s+1)}$$

$$\sum_{n_{[illegible]}=n_{is}+j_{sa}^{s}-j_{s}^{ik}[illegible]\Bbbk_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)}^{(\ )}$$

$$\frac{\left([illegible]n_i+2\cdot j^{sa}+[illegible]j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\Bbbk_1-\Bbbk_2\right)!}{([illegible]n_i-\boldsymbol{n}-\Bbbk_1-\Bbbk_2)!}\cdot$$

$$\frac{1}{\left([illegible]2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\ [illegible]\ \boldsymbol{n}\wedge\boldsymbol{l}\neq{}_{i}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$2\leq\boldsymbol{l}\leq D\ [illegible]\ \boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1\wedge$

$j_{sa}\ [illegible]\ j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}-1\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}+1\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik}\wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-\cdots)}^{\cdots} \sum_{j^{sa}=j_{ik}\cdots-j_{sa}^{ik}}^{\cdots} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}\cdots+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}\cdots-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik}}{(j_{ik} \cdots 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} \cdots_{sa} - \mathbb{k}_2 \cdots 1)!}{(j^{sa} \cdots_{ik} - 1)! \cdot (n_{ik} \cdots j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(\cdots j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} \right) +
$$

$$
\left(\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\cdots} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\left. \frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \right) \cdot
$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)}\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}}^{(\quad+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(\quad-n_{ik}-\quad-1)!}{(j_{ik}-2)!\cdot(\quad-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{\quad}-\mathbb{k}_2-1)!}{(j^{sa}-\quad_{ik}-1)!\cdot(\quad_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

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$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right.}$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\quad+j_{sa}-j^{sa}\quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \quad+j_{sa}-s= \quad \wedge$

$D+j_{sa}^{ik}-\boldsymbol{n} < \boldsymbol{l_{ik}} \leq D+\boldsymbol{l} \quad j_{sa}^{ik}-\boldsymbol{n} \quad 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{ik} \leq j_{sa}-1 \wedge j_{sa} \quad j_{sa}^{ik}-1$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}\quad j_{sa}^{ik}, \cdots, \quad j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s+\quad \wedge$

$\mathbb{k}_z: z \quad 2 \wedge \mathbb{k} = \mathbb{k}_1+\quad \Rightarrow$

$$ {}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

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$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})}\sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}$$

$$\sum_{n_{ik}=n_{is}+}$$

$$\frac{\left(n_i+2\cdot j^{sa}+\right.\cdot j_{sa}^{ik}-2\cdot j_{ik}\ s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!}{-\boldsymbol{n}-\mathbb{k}_1\ \mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+\ \cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D\geq\boldsymbol{n}\ \ \wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\ \ \leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j\ \ j_{sa}^{ik}\wedge$

$j_{ik}+j_{sa}\ \ j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\ \ >\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}}^{n_{ik}+j_{ik}-j^{sa}-} -j^{sa}+1
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - \boldsymbol{n} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

$$
\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} < j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$\boldsymbol{c}_{\dots j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+j_{sa}^{ik}-s+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\dots} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\dots}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\dots} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\dots}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\boldsymbol{\cdot} j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{\left(\boldsymbol{l_s}+j_{ik}-j_{ik}-\boldsymbol{l}\right)!\,(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j^{sa}+s-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}-j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l}-j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_s} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge \mathbb{k} = \mathbb{k} > \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa} < j_{sa}-j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = +\mathbb{k} \wedge$

$\mathbb{k} \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fz S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l})} \sum_{(j_{ik} = j^{sa} + \boldsymbol{n} - D)}^{\boldsymbol{l_i} + j_{sa}} \sum_{j^{sa} = \boldsymbol{n} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 2}^{n} \sum_{n_i = \boldsymbol{n} + \mathbb{k}_1 + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{\boldsymbol{l_s} + j_{sa} - \boldsymbol{l}} \sum_{j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - s - 2\cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2\cdot j^{sa} + 2\cdot j_{sa}^{ik} - 2\cdot j_{ik} - \quad \cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s} - \quad - 1)!}{\left(\boldsymbol{l_s} + \quad j_{ik} - \boldsymbol{l}\right)!\ \quad - j_{sa}^{ik} - 1)!}\cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D - j^{sa} + s - \quad \boldsymbol{l_i} - j_{sa} \quad \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} \quad _{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} \quad _{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l} \quad - j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_s} \leq D + \boldsymbol{l_s} + j_{sa} \quad \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \quad = \mathbb{k} > \quad \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa} \quad < j_{sa} - \quad j_{sa}^{s} \quad j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \quad \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k} \quad j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = \quad + \mathbb{k} \wedge$

$\mathbb{k} \quad \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{k=\boldsymbol{l}}^{n} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-D-j_{sa})}^{(\boldsymbol{l_{ik}}-1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}^{\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{\left(\boldsymbol{l_s}+j_{ik}-j_{ik}-\boldsymbol{l}\right)!\,(j_{ik}-j_{sa}^{ik}-1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+$ $\wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}$ $_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}$ $_{a}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l}$ $j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D+s-\boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge$ $\leq D-\boldsymbol{n}+1 \wedge$

j_{sa}^{ik} $j_{ik} \leq j^{sa}+j_{s}$ $-j_{sa} \wedge$

$j_{ik}+j_{sa}$ $j_{sa}^{ik} \leq j^{sa} \leq$ $+j_{sa}-s \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1$ $\boldsymbol{l}_{\boldsymbol{i}} \wedge \boldsymbol{l}$ $+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \leq D+$ $^{ik}-\boldsymbol{n} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n}\big)\big) \wedge$

$\geq \boldsymbol{n} <$ $\wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}<j_{sa}-1 \wedge j_{sa}^{s}<j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{sa}+1}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(\quad - 1)!}{(n_{\quad} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa}} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}}{(\quad - j_{ik} - \quad + 1)! \cdot (j_{ik} - j_{sa} - 1)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_{sa}} - s)!}{(D - j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}}) \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=j_{sa}+1}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)!} \cdot
$$

$$
\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j^{sa} + s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}
$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\boldsymbol{\cdot}\ j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{\left(\boldsymbol{l_s}+j_{ik}-j_{ik}-\boldsymbol{l}\right)!\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j^{sa}+s-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D\geq \boldsymbol{n}<n\wedge \boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge \boldsymbol{l_s}\leq D-\boldsymbol{n}+\ \wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq \boldsymbol{n}\ _{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}\ _{a}=\boldsymbol{l_{ik}}\wedge$

$D+j^{ik}-\boldsymbol{n}<\boldsymbol{l_{ik}}\ D+\boldsymbol{l_s}+j_{sa}^{ik}-\ -1\Big)$

$(\ \geq \boldsymbol{n}<n\wedge\ \neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\ \leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\ j_{ik}\leq j^{sa}+j_{s}\ -j_{sa}\wedge$

$\ _{k}+j_{sa}\ j_{sa}^{ik}\leq j^{sa}\leq\ +j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1\ \wedge\ +j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\ j_{sa}-\ <\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1)\Big)\wedge$

$D\geq \boldsymbol{n}<\ \wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 6\wedge \boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z: z=2\wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{(\boldsymbol{l_{ik}}-1)!}{(\boldsymbol{l_{ik}}-j_{ik}-1)!\cdot(j_{ik}-j_{sa}^{ik}-1)!}\cdot
$$

$$
\frac{(D+j^{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}
$$

$$
\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}
$$

$$
\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot
$$

$$
\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}
$$

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$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{n} - j_{sa}^{ik} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \boldsymbol{l_i} + j_{sa} - s \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z \cdots 2 \wedge \mathbb{k} = \mathbb{k}_1 \cdots \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l})} \sum_{(j_{ik} = j_{sa}^{ik}} \quad \sum_{j^{sa} = \boldsymbol{l_s} + \quad - \boldsymbol{l} + 1}^{\quad - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \quad \sum_{\quad - j_{ik} + 1)}^{(n_i - j_{ik} - \quad + 1)} \quad \sum_{n_{ik} + j_{ik} - \quad + \mathbb{k}_2}^{\quad = \boldsymbol{n} - j^{sa} + 1}$$

$$\frac{(n_i \quad n_{ik} - \mathbb{k}_1 \quad}{(j_{ik} \quad 2)! \cdot (n_i \quad n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - \quad - \mathbb{k}_2 \quad 1)!}{(j^{sa} - \quad - 1)! \cdot (n_{ik} \quad j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\quad_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa})}^{\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1} \sum_{j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} + j_{sa}^{ik} - j_{ik})}^{(n_i - j_s + 1)}$$

$$\sum_{n_{ik} = n_{is} + j_{sa}^{s} - j_{sa}^{ik} - \mathbb{k}_1} \sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)}$$

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$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D\geq \boldsymbol{n}<n\wedge \boldsymbol{l}\neq {}_{\boldsymbol{i}}\boldsymbol{l}\wedge \boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq \boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{n}-j_{sa}^{ik}\wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_{sa}}+s-\boldsymbol{n}-j_{sa}\Big)\vee$

$(D\geq \boldsymbol{n}<n\wedge \boldsymbol{l}\neq {}_{\boldsymbol{i}}\boldsymbol{l}\wedge \boldsymbol{l_s}\leq -\boldsymbol{n}+$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq {}^{sa}\leq \boldsymbol{n}+j_{sa}-$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+=\boldsymbol{l_s}\wedge \boldsymbol{l}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l}\leq D+\boldsymbol{l}-j_{sa}-\boldsymbol{n}-1)\Big)\wedge$

$D\geq <n\wedge I=\mathbb{k}>\wedge$

$j_{sa}\leq j_{sa}^{i}-\wedge j_{sa}^{ik}<j-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s\geq 6\wedge \boldsymbol{s}\neq +\mathbb{k}\wedge$

$\wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)}\ \sum_{(j_{ik}=j_{sa}^{ik}+1)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

$$\sum_{\boldsymbol{l}=\boldsymbol{l_{sa}}+1}^{(\boldsymbol{l_s}+j_{sa}^{ik})} \sum_{(j_{ik}=\boldsymbol{l_{sa}}-\boldsymbol{l}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{}^{}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{}^{}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\ \ )!}\cdot$$

$$\frac{1}{(n+2\cdot j^{sa}+\ \ _{sa}-2\cdot j_{ik}-2\cdot j_{sa})!}\cdot$$

$$\frac{(\ \ -\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{}^{}-j_{ik}-\ \ \right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\ \ \boldsymbol{l_i})!}{(D+j^{sa}+j_{}^{}-\boldsymbol{n}-\boldsymbol{l_i}-j_{}^{})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$$\Big((D\geq \boldsymbol{n}<n\wedge \boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\ \ \leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+\ \ -j_{sa}^{ik}\leq j^{}\leq \boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\ \ \wedge \boldsymbol{l_{sa}}+\ \ -j_{sa}>\boldsymbol{l_{ik}}\wedge$$

$$D+\ \ -\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+\ \ -\boldsymbol{n}-1)\vee$$

$$(D\geq \boldsymbol{n}\ \ \wedge \boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\ \ \leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq\ \ \leq j^{sa}\ \ \ \ j_{sa}\wedge$$

$$j_{ik}+j_{sa}\ \ \ \ \leq j^{sa}\leq \boldsymbol{n}+j_{sa}-s\wedge$$

$$\boldsymbol{l}\ \ -j_{sa}\ \ 1>\boldsymbol{l_s}\wedge$$

$$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1\wedge$$

$$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_{sa}}+s-\boldsymbol{n}-j_{sa})\vee$$

$$(D\geq \boldsymbol{n}<n\wedge \boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge \boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \le D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l} \ne {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \le D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \le D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ge 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\sum_{j_{ik}, j^{sa}} \sum_{k} \sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{(j^{sa}-j_{sa})} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(\quad-1)!}{(n_{\quad}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{s}}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}\quad}{(\quad-j_{ik}-\quad+1)!\cdot(j_{ik}-\quad-1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+\quad-\boldsymbol{l_{ik}}\quad)!}{(j_{ik}+\quad-j^{sa}-\boldsymbol{l_{ik}})!\,(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D+j_{s}-\boldsymbol{l_{sa}}-s)!}{(D\quad-j^{sa}-\quad\boldsymbol{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-j_{ik})}^{(n_i-j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\quad)} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!}\cdot$$

$$\frac{1}{\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l}\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+s-\boldsymbol{n}-\boldsymbol{l_i}-j_{sa})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa})$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} -$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\Big) \wedge$

$n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1)} \sum_{(j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j^{sa}+\boldsymbol{l_{sa}}-j_{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}+1)} \sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa})}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot
$$

$$
\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{\left(j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s\right)}^{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=n_i\right.}^{(n_i+1)}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2}} \cdot$$

$$\frac{1}{\left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\left(\boldsymbol{l_s} + j_{sa}^{ik} - j_{ik} - \boldsymbol{l}\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + \quad - s - \boldsymbol{n} - \boldsymbol{l_i} - j_{sa})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \quad {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \quad + 1 \wedge$

$j_{sa}^{ik} \leq \quad \leq j^{sa} + j_{sa}^{ik} - \quad a \wedge$

$j_{ik} + j_{sa} - \quad \leq j^{sa} \leq \quad + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} \quad s \quad + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa}^{ik} - \quad < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1\Big) \vee$

$(D \quad < n \wedge \boldsymbol{l} \neq \quad {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

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$$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \le D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$$

$$D + s - \boldsymbol{n} < \boldsymbol{l_i} \le D + \boldsymbol{l_{sa}} + s - \boldsymbol{n} - j_{sa}) \vee$$

$$(D \ge \boldsymbol{n} < n \wedge \boldsymbol{l} \ne \ {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \le D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \le D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1)\big) \wedge$$

$$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \ge 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$\sum_{j_z \supset j_{ik}, j} \sum_{\boldsymbol{l}=(j_{ik}=j-j_{sa}^{ik}-j_{sa})}^{(\ )} \sum_{j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}}^{\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}} \sum_{j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+j_{sa}^{ik}-i}$$

$$\sum_{n_{ik}=n_{is}+j_{sa}^{s}-j_{sa}^{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{i}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{s}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-)!}\cdot$$

$$\frac{1}{(\boldsymbol{n}+2\cdot j^{sa}+\ j_{sa}-2\cdot j_{ik}-2\cdot j_{sa})!}\cdot$$

$$\frac{(-\boldsymbol{l}-1)!}{\left(\boldsymbol{l_s}+j_{-}-j_{ik}-\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j^{sa}+j_{-}-\boldsymbol{n}-\boldsymbol{l_i}-j_{-})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_{s}}$ $D+j_{sa}-\boldsymbol{n}$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}-$

$j_{ik}+j_{sa}-j_{sa}^{ik}+$ $j^{sa} \leq \boldsymbol{n}+j_{sa}-$ $\wedge$

$\boldsymbol{l}-j_{sa}^{ik}+1$ $\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}$ $j_{sa}^{ik}-j_{sa} \geqslant \boldsymbol{l_{ik}} \wedge$

$D > \boldsymbol{n} < n \wedge I =$ $0 \wedge$

j_{sa} $\leq j_{sa}$ $-1 \wedge j_{sa}^{ik} < j_{s}$ $-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1,$ $\cdots$ $j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

s $6 \wedge$ $s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2$ $\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\ {}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}} \right.$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)+$$

$$\Bigg(\sum_{k=\boldsymbol{i}\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik})}^{\boldsymbol{l_{sa}}-\boldsymbol{i}\boldsymbol{l}+1} \sum_{j^{sa}=j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot(j^{sa}-j_{sa})!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}\Bigg)-$$

$$\sum_{k=\boldsymbol{i}\boldsymbol{l}}^{(\quad)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\quad)} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \leq D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_{sa}} = \sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{\left(j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}\right)}^{\boldsymbol{l_{sa}} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1} \sum_{j^{sa} = j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1)}^{(n_i - j_{ik} - \mathbb{k}_1 + 1)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1}^{n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

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$$\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-s-2\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\ -2\cdot j_{sa}\right)}\cdot$$

$$\frac{(D-\boldsymbol{l_i}}{(D+s-\boldsymbol{n}\ )!\ (\boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{\ }}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}<j_{\ }-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa}\ ,\ ,j_{sa}^{i}\right\}\wedge$

$s\geq 6\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{\ j_{ik},j^{sa}}=\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )}\sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})}^{\boldsymbol{l_{sa}}-\ _{i}\boldsymbol{l}+1}\sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_{ik}} - {}_{i}\boldsymbol{l} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik} - {}_{i}\boldsymbol{l} + 1)! \cdot (j_{ik} - j_{sa}^{ik} - 1)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} -$$

$$\sum_{k={}_{i}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!}$$

$$\frac{(\ )}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - j_{sa}^{ik} < j_{s} - 1 \wedge j_{sa}^{s} < j_{sa}^{i} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \ldots \wedge$

$s \geq 6 \wedge = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k={}_{i}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{ik}}+j_{sa}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-{}_{i}\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right.}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}-s)!}$$

$$\sum_{k=}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_i-j_{ik}-\mathbb{k}_1-1)\,n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i+2\cdot j^{sa}+2\cdot j_{sa}^{ik}-2\cdot j_{ik}-\cdot j_{sa}-\mathbb{k}_1-\mathbb{k}_2\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}-2\cdot j^{sa}+2\cdot j_{sa}-2\cdot j_{ik}-s-2\cdot j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}={}_{i}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$j_{sa}^{ik}\leq j_{ik}\leq j^{sa}+j_{sa}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}<j^{sa}\leq\boldsymbol{n}+j_{sa}-s\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}-j_{sa}+j_{sa}^{ik}=\boldsymbol{l_{ik}}\wedge$

$D\geq\boldsymbol{n}\wedge I=\mathbb{k}>\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}<j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa},\cdots,j_{sa}^{ik},\cdots,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s\geq 6\wedge\boldsymbol{s}\leq s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$fzS_{j_{ik},j^{sa}}=\sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-{}_{i}\boldsymbol{l}-j_{sa}+1\right)}\sum_{(j_{ik}=j_{sa}^{ik})}\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!}$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\quad - j^{sa})!}$$

$$\frac{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{i}\right)}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + \quad \right) \cdot \left(j_{ik} - j_{sa}^{ik} \quad \right)!} \cdot$$

$$\frac{j_{sa} - \boldsymbol{l}_{\boldsymbol{s}} - s)!}{(D + \quad - \boldsymbol{n} \quad)! \quad - s)!} -$$

$$\sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\quad \mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i + 2 \cdot j \quad + 2 \cdot j_{sa}^{ik} \quad \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(\quad \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2) \left(\boldsymbol{n} \quad \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} \quad n \wedge \boldsymbol{l} = \quad {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \quad \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq \quad + j_{sa}^{ik} \quad a \wedge$

$j_{i} \quad j_{sa} \quad j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \quad > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$D \quad < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}} -\ _{\boldsymbol{i}}\boldsymbol{l}+1\right)} \sum_{\left(j_{ik}=j_{sa}^{ik}\right)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1\right)}^{\left(n_i-j_{ik}-\mathbb{k}_1+1\right)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - \boldsymbol{n} - j^{sa})!}{(n_{sa} - \boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D - j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} -
$$

$$
\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{\left(j_{ik}=j_{sa}^{ik}\right)} \sum_{j^{sa}=j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1\right)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(\quad + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2)!}{(n_i - \quad - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}
$$

$D \geq \boldsymbol{n} < \quad \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{ik}} \leq D + j_{sa}^{ik} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\ {}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\ {}_{i}\boldsymbol{l}-j_{sa}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{} \sum_{} \sum_{=\boldsymbol{n}-j^{sa}+1}
$$

$$
\frac{(n_i \quad n_{ik} - \mathbb{k}_1}{(j_{ik} \quad 2)! \cdot (n_i \quad n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} \quad - \mathbb{k}_2 \quad 1)!}{(j^{sa} \quad - 1)! \cdot (n_{ik} \quad j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \ {}_{i}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - \ {}_{i}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} -
$$

$$
\sum_{k=\ {}_{i}\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik})}^{(\ )} \sum_{j^{sa}=j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}
$$

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$$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$$

$$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$$

$$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$$

$$\boldsymbol{l_{sa}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge$$

$$\boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n})\Big) \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{\cdot} - 1 \wedge$$

$$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots \} \wedge$$

$$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_{ik},j^{sa}} = \sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{sa}} - {}_{\boldsymbol{i}}\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{s}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=}^{j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{s} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(\ )}{(D - s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{i}\boldsymbol{l} \wedge \boldsymbol{l_{sa}} \leq D + j_{sa} - \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} - 1 \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} + 1 \leq j^{sa} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \ > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - \ j_{sa}^{ik} < j_{s} - 1 \wedge j_{sa}^{s} < j_{sa}^{i} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \ \mathbb{k}_2, j_{sa}, \ j \wedge$

$s \geq 6 \wedge \ = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \ = \mathbb{k}_1 + \ \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa})} \sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{ik}}+j_{sa}-\ _{i}\boldsymbol{l}-j_{sa}^{ik}+1} \right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\left. \frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot \right.$$

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$$\frac{(n_{ik}-n_{sa}-\mathbb{k}_2-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-{}_{i}\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-\right.}\cdot$$

$$\left.\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(-s)!}\right)\cdot$$

$$\left(\sum_{k={}_{i}\boldsymbol{l}}^{(j^{sa}+j_{sa}^{ik}-j_{sa}-1)}\sum_{(j_{ik}=j_{sa}^{ik})}^{}\sum_{j^{sa}=j_{sa}+1}^{j_{ik}-j_{sa}^{ik}+1}\right.$$

$$\sum_{n_i=\boldsymbol{n}+}^{n}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{(j_{ik}}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(-n_{ik}-1)!}{(j_{ik}-2)!\cdot(-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{-n_{ik}-\mathbb{k}_2-1)!}{(j^{sa}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa}-\mathbb{k}_2)!}\cdot$$

$$\frac{(n_{sa}-1)!}{(n_{sa}+j^{sa}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j^{sa})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-{}_{i}\boldsymbol{l}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}-1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(D+j^{sa}-\boldsymbol{n}-\boldsymbol{l_{sa}})!\cdot(\boldsymbol{n}+j_{sa}-j^{sa}-s)!}+$$

$$\sum_{k={}_{i}\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}}-{}_{i}\boldsymbol{l}+1\right)}\sum_{(j_{ik}=j_{sa}^{ik})}^{}\sum_{j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-{}_{i}\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}-{}_{i}\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j$$

$$\frac{\left(\boldsymbol{l_{ik}} - {}_{\boldsymbol{i}}\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_{\boldsymbol{i}}\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!}$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j$$

$$\frac{(D + j^{sa} - \boldsymbol{l_{sa}} - \boldsymbol{n} - 1)!}{(D + j^{sa} - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2 - s)!}\Bigg) -$$

$$\sum_{k=\left(\boldsymbol{i}\right.}^{(\quad)} \sum_{j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i+\mathbb{k}\,(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{n} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\quad)}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{- \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \quad < n \wedge \boldsymbol{l} = \quad {}_{\boldsymbol{i}}\boldsymbol{l} \quad \boldsymbol{l_{sa}} \leq D + j_{sa} - \boldsymbol{n} \wedge$

$j_{sa}^{ik} \leq j_{ik} \quad {}^{sa} + j_{sa}^{ik} - \quad - 1 \wedge$

$j_{ik} + \quad - j_{sa}^{ik} + \quad \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \quad > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge$

$\quad \boldsymbol{n} \quad \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_{ik},j^{sa}} = \left(\sum_{k=\ {}_i\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}} -\ {}_i\boldsymbol{l}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - {}_i\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_i\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot
$$

$$
\left. \frac{(D_{sa} - j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D_{sa} + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!} \right) +
$$

$$
\left(\sum_{k=\ {}_i\boldsymbol{l}}^{\left(\boldsymbol{l_{ik}} -\ {}_i\boldsymbol{l}+1\right)} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}} -\ {}_i\boldsymbol{l}+1} \right.
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik}-2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot
$$

$$
\left. \frac{\left(\boldsymbol{l_{ik}} - {}_i\boldsymbol{l} - j_{sa}^{ik}\right)!}{\left(\boldsymbol{l_{ik}} - j_{ik} - {}_i\boldsymbol{l} + 1\right)! \cdot \left(j_{ik} - j_{sa}^{ik} - 1\right)!} \cdot \right.
$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!}\Bigg) -$$

$$\sum_{k=\ {}_{i}\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik})}^{(\ )} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}} {}^{sa}-\mathbb{k}_2$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} {}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!}$$

$$\frac{(}{(D - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} +$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n}_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l}$ $j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge$ $= \mathbb{k} >$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}$ $j_{sa} -$ $j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s},$ $\mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}$ $_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} =$ $\mathbb{k} \wedge$

$\mathbb{k}$ $= \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_{ik},j^{sa}} = \sum_{k=\ {}_{i}\boldsymbol{l}} \sum_{(j_{ik}=j_{sa}^{ik})}^{(\ )} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j_{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} - s)!}$$

$$\sum_{l\,(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}} \sum$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(\quad=n_i-j_{ik}} \sum_{+1)\ n_{sa}=n_{ik}} \sum_{j^{sa}-\mathbb{k}_2}$$

$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} \quad - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\quad + 2 \cdot j^{sa} + 2 \cdot \quad - 2 \cdot j_{ik} - s - 2 \cdot j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{\quad + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq \quad - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq \quad _{ik} \leq j^{sa} + j \quad - j_{sa} \wedge$

$j \quad + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \quad + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} \quad j_{sa}^{ik} + 1 = \boldsymbol{l_s} \quad + j_{sa}^{ik} \quad > \boldsymbol{l_{ik}} \wedge$

$\boldsymbol{l_{sa}} \leq D \quad j_{sa} - \boldsymbol{n} \wedge \boldsymbol{l_i} \quad D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \quad \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \quad j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad _{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n}) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$j_{sa}^{ik} \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$\boldsymbol{l_i} \leq D + s - \boldsymbol{n})) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} < j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 6 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S}_{j_{ik}} \sum_{k=\ _{i}\boldsymbol{l}}^{(\ )} \sum_{j^{sa}=j_{sa}}^{\boldsymbol{l_{sa}}-\ _{i}\boldsymbol{l}+} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}}^{(n_i-j_{ik}-\ 1)} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} \quad (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - \mathbb{k}_2 - 1)!}{(j^{sa} - j \quad 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa} - \mathbb{k}_2)!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(n_{sa} + j^{sa} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j^{sa})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot (j^{sa} - j_{sa})!} \cdot$$

$$\frac{(D + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(D + j^{sa} - \boldsymbol{n} - \boldsymbol{l_{sa}})! \cdot (\boldsymbol{n} + j_{sa} - j^{sa} - s)!} -$$

$$\sum_{k=\ _{i}\boldsymbol{l}}^{(\ )} \sum_{(j_{ik}=j_{sa}^{ik})} \sum_{j^{sa}=j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )} \sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

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$$\frac{\left(n_i + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa} - \mathbb{k}_1 - \mathbb{k}_2\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + 2 \cdot j^{sa} + 2 \cdot j_{sa}^{ik} - 2 \cdot j_{ik} - s - 2 \cdot j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

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DİZİN

B

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.1.1.1.1/3-4
tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.1.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.1.1/4
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.1.1.2.1/3-4
tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.2.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.2.1/4
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.1.1.3.1/3-4
tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.3.1/4
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu simetrinin son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.1.1.1.1/230-231
tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.1.1/187-188
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.1.1/321
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.1.2.1.1/230-231
tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.2.1/187-188
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.2.1/321
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.1.3.1.1/230-231
tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.3.1/187-188
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.3.1/321
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.1.4.1.1/3-4
tek kalan düzgün simetrik olasılık, 2.3.3.2.1.4.1.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.4.1.1/4
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.1.4.2.1/3-4
tek kalan düzgün simetrik olasılık, 2.3.3.2.1.4.2.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.4.2.1/4
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.1.4.3.1/3-4
tek kalan düzgün simetrik olasılık, 2.3.3.2.1.4.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.4.3.1/4
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu

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simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.1.1.1.1/233

tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.1.1/190

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.1.1/324-325

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.1.1.2.1/233

tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.2.1/190

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.2.1/324-325

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.1.1.3.1/233

tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.3.1/190

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.3.1/324-325

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.1.6.1.1/3-4

tek kalan düzgün simetrik olasılık, 2.3.3.2.1.6.1.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.6.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.1.6.2.1/3-4

tek kalan düzgün simetrik olasılık, 2.3.3.2.1.6.2.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.1.6.3.1/3-4

tek kalan düzgün simetrik olasılık, 2.3.3.2.1.6.3.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.6.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.1.1.1.1/118

tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.1.1/80-81

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.1.1/165

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin durumuna

tek kalan simetrik olasılık, 2.3.3.1.1.2.1/118

tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.2.1/80-81

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.2.1/165

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.1.1.3.1/118

tek kalan düzgün simetrik olasılık, 2.3.3.2.1.1.3.1/80-81

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.1.1.3.1/165

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.2.1.1.1/4

tek kalan düzgün simetrik olasılık, 2.3.3.2.2.1.1.1/3-4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

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tek kalan simetrik olasılık, 2.3.3.1.2.1.2.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.1.2.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.2.1.3.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.1.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.1.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.2.2.1.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.2.1.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.2.1.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.2.2.2.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.2.2.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.2.2.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.2.2.3.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.2.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.2.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.2.4.1.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.4.1.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.2.4.2.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.4.2.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.2.4.3.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.4.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.2.6.1.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.6.1.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.6.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.2.6.2.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.6.2.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre

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tek kalan simetrik olasılık, 2.3.3.1.2.6.3.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.6.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.6.3.1/4
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.2.7.1.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.7.1.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.7.1.1/7-8
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.2.7.2.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.7.2.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.7.2.1/7-8
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.2.7.3.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.2.7.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.2.7.3.1/4
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.3.1.1.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.3.1.1.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.3.1.1.1/5
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.3.1.2.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.3.1.2.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.3.1.2.1/5
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.3.1.3.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.3.1.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.3.1.3.1/5
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.3.2.1.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.3.2.1.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.3.2.1.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.3.2.2.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.3.2.2.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.3.2.2.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.3.2.3.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.3.2.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.3.2.3.1/5
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin herhangi iki durumuna bağlı

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tek kalan simetrik olasılık, 2.3.3.1.4.1.1.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.4.1.1.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.4.1.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin herhangi iki durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.4.1.2.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.4.1.2.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.4.1.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin herhangi iki durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.4.1.3.1/4
tek kalan düzgün simetrik olasılık, 2.3.3.2.4.1.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.4.1.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.4.1.1.1/839-840

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.4.1.2.1/839-840

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.4.1.3.1/839-840

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.5.1.1.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.5.1.1.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.5.1.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.5.1.2.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.5.1.2.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.5.1.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.5.1.3.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.5.1.3.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.5.1.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.5.2.1.1/6
tek kalan düzgün simetrik olasılık, 2.3.3.2.5.2.1.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.5.2.1.1/10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.5.2.2.1/6
tek kalan düzgün simetrik olasılık, 2.3.3.2.5.2.2.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.5.2.2.1/10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.5.2.3.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.5.2.3.1/3-4

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tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.5.2.3.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.8.1.1.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.1.1.1/7-8
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.8.1.2.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.1.2.1/7-8
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.8.1.3.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.1.3.1/7-8
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.8.2.1.1/11
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.2.1.1/11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.8.2.2.1/11
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.2.2.1/11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.8.2.3.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.8.2.1.1/7-8
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.1.1.1/7
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.1.1.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.1.1.1/5-6
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.1.2.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.1.2.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.1.2.1/5-6
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.1.3.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.1.3.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.1.3.1/5-6
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.2.1.1/6
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.2.1.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.2.1.1/8
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

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tek kalan simetrik olasılık, 2.3.3.1.6.2.2.1/6
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.2.2.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.2.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.2.3.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.2.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.4.1.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.4.1.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.4.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.4.2.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.4.2.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.4.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.4.3.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.4.3.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.4.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.6.6.1.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.6.1.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.6.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.6.2.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.6.2.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.6.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.6.3.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.6.3.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.6.3.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.7.1.1/6
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.7.1.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.7.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.6.7.2.1/6
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.7.2.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.7.2.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

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tek kalan simetrik olasılık, 2.3.3.1.6.7.3.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.6.7.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.6.7.3.1/5
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.1.1.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.1.1.1/7-8
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.1.2.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.1.2.1/7-8
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.1.3.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.1.3.1/7-8
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.2.1.1/11
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.2.1.1/11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.2.2.1/11
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.2.2.1/11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.2.3.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.2.3.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.4.1.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.4.1.1/11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.4.2.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.4.2.1/11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.4.3.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.4.3.1/11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.6.1.1/7
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.6.1.1/11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son

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durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.9.6.2.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.6.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.9.6.3.1/7

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.6.3.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.9.7.1.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.7.1.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.9.7.2.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.7.2.1/11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

tek kalan simetrik olasılık, 2.3.3.1.9.7.3.1/11

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.9.7.3.1/7-8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.1.1.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.1.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.3.7.1.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.1.2.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.1.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.3.7.1.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.1.3.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.1.3.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.3.7.1.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.2.1.1/7

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.2.1.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.2.1.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.2.2.1/7

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.2.2.1/4

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.2.2.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

tek kalan simetrik olasılık, 2.3.3.1.7.2.3.1/5

tek kalan düzgün simetrik olasılık, 2.3.3.2.7.2.3.1/3-4

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tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.2.3.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.7.4.1.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.7.4.1.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.4.1.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.7.4.2.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.7.4.2.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.4.2.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.7.4.3.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.7.4.3.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.4.3.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.7.6.1.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.7.6.1.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.6.1.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.7.6.2.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.7.6.2.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.6.2.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.7.6.3.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.7.6.3.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.6.3.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.7.7.1.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.7.7.1.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.7.1.1/10-11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.7.7.2.1/7
tek kalan düzgün simetrik olasılık, 2.3.3.2.7.7.2.1/4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.7.2.1/10-11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
tek kalan simetrik olasılık, 2.3.3.1.7.7.3.1/5
tek kalan düzgün simetrik olasılık, 2.3.3.2.7.7.3.1/3-4
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.7.7.3.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.10.1.1.1/9

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tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.1.1.1/10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.1.2.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.1.2.1/10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.1.3.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.1.3.1/10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.2.1.1/15-16

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.2.1.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.2.2.1/15-16

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.2.2.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.2.3.1/9-10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.2.3.1/10

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.4.1.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.4.1.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.4.2.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.4.2.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.4.3.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.4.3.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.6.1.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.6.1.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.6.2.1/9

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.6.2.1/16

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.10.6.3.1/9

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tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.6.3.1/16
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.10.7.1.1/15-16
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.7.1.1/16
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.10.7.2.1/15-16
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.7.2.1/16
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi bir ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.10.7.3.1/9-16
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.10.7.3.1/16
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.11.1.1.1/10
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.1.1.1/10-11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.11.1.2.1/10
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.1.2.1/10-11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.11.1.3.1/10
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.1.3.1/10-11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.11.2.1.1/10
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.2.1.1/17-18
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.11.2.2.1/17
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.2.2.1/17-18
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.11.2.3.1/10
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.2.3.1/10-11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.11.4.1.1/10
tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.4.1.1/17-18
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı
tek kalan simetrik olasılık, 2.3.3.1.11.4.2.1/10

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tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.4.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.4.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.4.3.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.6.1.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.6.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.6.2.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.6.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.6.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.6.3.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.7.1.1/17

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.7.1.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.7.2.1/17

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.7.2.1/17-18

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.7.3.1/10

tek kalan düzgün olmayan simetrik olasılık, 2.3.3.3.11.7.3.1/10-11

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VDOİHİ'de Olasılık ve İhtimal konularının tanım ve eşitlikleri verilmektedir. Ayrıca VDOİHİ'de olasılık ve ihtimalin uygulama alanlarına da yer verilmektedir. VDOİHİ konu anlatım ciltleri ve soru, problem ve ispat çözümlerinden oluşmaktadır. Bu cilt bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz olasılık dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımın ilk bağımlı durumu hariç dağılımın başlayabileceği diğer bir bağımlı durum olan ve bağımsız olasılıklı durumla başlayan dağılımın aynı ilk bağımlı durumuyla başlayan dağılımlarda, simetrinin herhangi iki durumuna bağlı tek kalan düzgün olmayan simetrik olasılığın, tanım ve eşitliklerinden oluşmaktadır.

VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin herhangi iki durumuna bağlı tek kalan düzgün olmayan simetrik olasılık kitabında, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlardan, bağımsız olasılıklı durumla başlayıp ilk bağımlı durumu bağımlı olasılıklı dağılımın ilk bağımlı durumu hariç dağılımın başlayabileceği diğer bir bağımlı durum olan ve bağımsız olasılıklı durumla başlayan dağılımın aynı ilk bağımlı durumuyla başlayan dağılımlarda, simetrinin herhangi iki durumuna bağlı tek kalan düzgün olmayan simetrik olasılığın tanım ve eşitlikleri verilmektedir.

VDOİHİ'nin diğer ciltlerinde olduğu gibi bu ciltte de verilen ana eşitlikler, olasılık tablolarından elde edilen verilerle üretilmiştir. Diğer eşitlikler ise ana eşitliklerden teorik yöntemle üretilmiştir. Eşitlik ve tanımların üretilmesinde dış kaynak kullanılmamıştır.

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