VDOİHİ

Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Bağımlı Durumlu Simetrinin İlk Herhangi İki ve Son Durumunun Bulunabileceği Olaylara Göre Tek Kalan Düzgün Olmayan Simetrik Olasılık

Cilt 2.3.3.3.7.1.1.536

İsmail YILMAZ

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VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılık Cilt 2.3.3.3.7.1.1.536

İsmail YILMAZ

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

Dili: Türkçe + Matematik Mantık

Türkiye Cumhuriyeti Devleti
Kuruluşunun
100.Yılı Anısına

M. Atatürk

DÜZELTME

Bu cilt için

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

simgesi yerine

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

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.

VDOİHİ'de Olasılık;

- ✓ Makinaların insan gibi düşünebilmesini, karar verebilmesini ve davranabilmesini sağlayacak gerçek yapay zekayla ilişkilendirilmiştir.
- ✓ Dillerin matematik yapısı olduğu gösterilmiştir.
- ✓ Tüm tabanlarda, tüm dağılım türlerinde ve istenildiğinde dağılım türü ve tabanı değiştirerek çalışabilecek elektronik teknolojisinin temelidir.
- ✓ 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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simetrinin durumuna bağlı tek kalan düzgün olmayan simetrik olasılık

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durumlu 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 taraftan 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 haricinde dağılımın herhangi bir durumuyla başlayan dağılımlar (bunun yerine farklı dizilimli dağılımlarda simetride bulunmayan bir durumla başlayan dağılımlar) ve dağılımın ilk durumu özel 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 kullanılmaktır. Bu eşitlikler, bir bağımlı ve bir bağımsız olasılıklı dağılımlar için VDO Dİ Cilt 1'de çıkarılan eşitliklerle birleştirilerek, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlar için yeni eşitlikleri elde edilecektir. Eşitlikleri adlandırılmasında bir bağımlı olasılıklı farklı dizilimsiz dağılımlarda kullanılan adlandırmalar kullanılacaktır. Bu adların yanına 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 bölümde 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 ilk herhangi iki ve son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılığın eşitlikleri verilmektedir.

GÜLDÜNYA

SİMETRİDEN SEÇİLEN DÖRT DURUMA GÖRE TEK KALAN DÜZGÜN OLMAYAN SİMETRİK OLASILIK

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

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

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

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

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

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

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

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

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

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

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

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

$$\frac{(\boldsymbol{l_i}-\boldsymbol{l}+1)!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{l}\sum_{(j_{sa}^{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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

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

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

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1}$$

$$\boldsymbol{l_{sa}}+\boldsymbol{l}-s+1$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )}\sum_{(j^{sa}=j_i+j_{sa}}\sum_{j_i=1}$$

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

$$\sum_{(n_{sa}=}+j_{ik}-j^{sa}\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_{}-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\quad-\mathbb{k}_1-\mathbb{k}_{}\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\ldots\boldsymbol{l}\wedge\boldsymbol{l_i}\ldots D+s\ldots\wedge$

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

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

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

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

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

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

$s\geq4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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

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

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

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

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

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot
$$

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

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

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

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

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

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

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

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

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

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

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

$$ {}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{} \sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(j_i + j_{sa} - s)} \sum_{(j^{sa} = j_{sa} + 1)}^{\boldsymbol{l_s} + s - \boldsymbol{l}} \sum_{j_i = s + 1}^{} \sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}_{\boldsymbol{s}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-\boldsymbol{l}_{\boldsymbol{i}}-s)!}\cdot$$

$$\frac{(\boldsymbol{l}_{\boldsymbol{i}}-\boldsymbol{l}_{\boldsymbol{i}})!}{(j_i-\boldsymbol{n}-$$

$$\sum_{\boldsymbol{l_s}=\boldsymbol{l}}^{} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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

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

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

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{sa} + j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} + j_{sa} - s)}^{(\ )} \sum_{j_i = s+1}^{s-\boldsymbol{l}}$$

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

$$\sum_{(n_{sa} = n_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i + \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

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

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

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

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

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

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

$$
(n_{ik}+ \quad j^{sa}-\mathbb{k}_2)\ n_{sa}+j \quad j_i
$$

$$
\sum_{\boldsymbol{n}-j^{sa}+}^{\boldsymbol{n}-j_i+1} \sum_{n_s=\boldsymbol{n}-j_i+1}^{\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is}}{(j_s - 2)\ (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{s - n_{ik} - 1)!}{(j_{ik} - j_s - 1)\ (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

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

$$
\frac{(n_{sa} - n_s - 1)!}{i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

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

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

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

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

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

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1 \quad -j_s)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2) \quad (\boldsymbol{n}+j^{sa} \quad j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l}-1)!}{-\boldsymbol{l}+1)! \cdot (j_s-2)!}$$

$$\frac{(D}{(D+ \quad -\boldsymbol{n}-\boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

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

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

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

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

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

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

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\boldsymbol{l}=}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

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

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

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

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

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

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

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

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

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

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

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

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

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

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

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

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

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

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1}\quad\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ j_i\sum^{\boldsymbol{n}}_{sa}+s-j_{sa}$$

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

$$\sum_{(n_{sa}=n_{ik}-j^{sa}}^{(\ )}\ \sum_{j^{sa}-j_i}$$

$$\frac{(n_i+\ ^{sa}-j_i-\ -\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1\ \mathbb{k}_2)!\cdot(\boldsymbol{n}\ j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}\ j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \wedge\boldsymbol{l_i}\leq D+s-\ \wedge$

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is}}$$

$$\frac{(n_{is} - n_{ik}}{(j_{ik} - j_s}$$

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

$$\frac{a} - n_s - 1)!}{(j_i - j^{sa} - 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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

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

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-\quad j_s-\boldsymbol{l}+1)!\cdot(\quad-2)!}\cdot$$

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

$$\frac{(D-\quad)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{\quad}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{\quad=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

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

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

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} - j_{sa} + 2)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}} \sum_{j_i=j^{sa}-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_i-j_s+1} \sum_{+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}} \sum_{+j_{ik}-j^{s}} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j^{sa} - j_{} - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \mathbb{k}_1 - \mathbb{k}_{} \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l}_{} \boldsymbol{l} \wedge \boldsymbol{l_i} \; D + s - \wedge$

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

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

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

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

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

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

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

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

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

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

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

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-j_s-n_{ik}-j_{ik})!}\cdot
$$

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

$$
\frac{(n_{sa}-n_s-1)!}{(j_s-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

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

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-1)!\cdot(\ \ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\ \ -\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\ \ )!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

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

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

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

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

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

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

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

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

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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

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

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

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

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

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

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

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

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

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

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

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

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

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

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

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

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

$$\frac{(n_{s}-1)!}{(n_{s}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}}+s)!\cdot(j_i+j_{sa}-\boldsymbol{l}-s)!}\cdot$$

$$\frac{(\boldsymbol{l}-\boldsymbol{l_i})!}{j_i-\boldsymbol{n}-\boldsymbol{l}+\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\boldsymbol{l_{sa}}=\boldsymbol{l}}^{(\quad)}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j^{sa}=}\ \sum_{(\quad-j_{sa}+1)}^{(\quad-\boldsymbol{l}+1)}\ \sum_{j_i=\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+2}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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

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

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

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

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

$$\frac{(n_{s}-1)!}{(n_{s}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-} \sum_{(j^{sa}=j_i+j_{sa}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{=\boldsymbol{n}+\mathbb{k}-j_s)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+} \sum_{-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n}$ $\wedge \boldsymbol{l} \neq$ $_{\boldsymbol{i}}\boldsymbol{l} \wedge$ $\leq D - \boldsymbol{n} + 1 \wedge$

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

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

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

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

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

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

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

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

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

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

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

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

$$
+j_{ik}-j^{s} \Big)\, n_{sa}+j^{sa}-j_i
$$

$$
\sum_{(\quad=\boldsymbol{n}-j^{sa}+1)}^{} \sum_{-j_i+1}^{}
$$

$$
\frac{(n_{i} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

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

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

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

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

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

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{}
$$

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

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

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

$$\frac{(n_i - 1)}{(j_s - 2)\ (n_i - n_{is}\ - 1)!} \cdot$$

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

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

$$\frac{a} - n_s\ - 1)!}{j_i - j^{sa} - 1)\ (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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

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

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

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

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

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

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1$

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

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

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

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

$\mathbb{k}_-: z=2 \wedge$ $=\mathbb{k}_1+$ $\Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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

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

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

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

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

$$\frac{(n_s + \boldsymbol{n} - \boldsymbol{n} - 1)!}{(n_s + \boldsymbol{n} - \boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + \boldsymbol{l} - \boldsymbol{l_{sa}})!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D + \boldsymbol{l_i})!}{(D + \boldsymbol{l} - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

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

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

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

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

$$\frac{(\quad\boldsymbol{l_i})!}{(D+j_{\quad}-\boldsymbol{n}-\boldsymbol{l_i})!\quad j_i)!}-$$

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

$$\sum_{=\boldsymbol{n}+\mathbb{k}}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$D\geq\boldsymbol{n}<\quad\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

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

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

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

$$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1\wedge$$

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

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

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

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

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

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum^{(\ \ )} \sum_{\boldsymbol{l}=\boldsymbol{l}} \left(j_s=j_{ik}-j_{sa}^{ik}+1\right)
$$

$$
(\boldsymbol{l_i}+\boldsymbol{n}-D-s-1) \qquad 1
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa}+} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}
$$

$$
n \qquad -j_s+1) \qquad j_{ik}-\mathbb{k}_1
$$

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

$$
+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i
$$

$$
\sum_{sa}=\boldsymbol{n}-j^{sa}+1) \quad \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

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

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

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

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

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

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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

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

$$(n_{ik}+j_{ik}$$

$$\sum_{(n_{sa}=\boldsymbol{n}$$

$$\frac{(n_i - n_{is}$$

$$(j_s$$

$$\frac{(n_{is}$$

$$(j_{ik}-j_s$$

$$\frac{(n_{ik}$$

$$(j^{sa}$$

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

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

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

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge j_{sa}-s>0 \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}-\boldsymbol{n}-1 \wedge$

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

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

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

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

$\mathbb{k}_z: z \geq 0 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

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

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

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

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

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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

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

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

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-\quad j_s-\boldsymbol{l}+1)!\cdot(\quad-2)!}\cdot$$

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

$$\frac{(D-\quad)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\;-$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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

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

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

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \quad_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

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

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

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

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \le D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

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

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

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

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

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

$$S_{j_s, j_{ik}, \ldots, j_i} = \sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

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

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

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - \quad +$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j \quad j_{sa}^{ik}+1)}$$

$$(\boldsymbol{l_s}+ \quad -\boldsymbol{l})$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \quad \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}- \quad) \; j_i=j^{sa}+s-j_{sa}}$$

$$n \qquad \qquad n_{is} \quad -j_{ik}-\mathbb{k}_1$$

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

$$\quad _{ik}+j_{ik}- \quad \mathbb{k}_2) \; n_{sa}+j^{sa}-j_i$$

$$\sum_{a=\boldsymbol{n}-j^{sa}+1)} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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

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

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

$$\frac{(n_i+j_{sa}-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(n_{sa}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \geq D-\boldsymbol{n}+1 \wedge$

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

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

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

$D+ \quad -\boldsymbol{n} < \boldsymbol{l_i} \leq D \quad \boldsymbol{l_s}+s \quad -1 \wedge$

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

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

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

$\quad > 4 \wedge s \quad s+\mathbb{k} \wedge$

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

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

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

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

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

$$\frac{(n_i - 1)}{(j_s - 2)\ (n_i - n_{is}\ - 1)!} \cdot$$

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

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

$$\frac{{}_{a} - n_s\ - 1)!}{{}_{i} - j^{sa} - 1)\ (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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

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

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

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

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

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

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

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

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

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

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

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

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

$$fzS_{j_s\ , j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

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

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

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}_{\boldsymbol{s}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-\boldsymbol{l}-s)!}\cdot$$

$$\frac{(\boldsymbol{l}-\boldsymbol{l_i})!}{j_i-\boldsymbol{n}-\boldsymbol{l}!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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

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

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

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{sa}^{ik}+1)}$$

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

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{=\boldsymbol{n}+\mathbb{k}-j_s}^{j_s+1} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+}^{(\ \ )} \sum_{-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i + \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n}$ $\wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge$ $\leq D - \boldsymbol{n} + 1 \wedge$

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

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

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

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

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

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

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

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

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

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

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

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

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

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

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

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

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

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

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

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

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

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

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

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

$$\frac{a} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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

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

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

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

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

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

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1$

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

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

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

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

$\mathbb{k}_-: z=2 \wedge$ $=\mathbb{k}_1+$ $\Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=2)}$$

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

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

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

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

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

$$\frac{(n_s + \boldsymbol{n} - 1)!}{(n_s + \boldsymbol{n} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + \boldsymbol{l} - \boldsymbol{l_{sa}})!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D + \boldsymbol{l_i})!}{(D + \boldsymbol{l} - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

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

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa}}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

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

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

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

$$\frac{(\quad \boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot\quad j_i)!}-$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+2}\ \sum_{j_i=\quad -D-s+1)}^{}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\quad)}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{}$$

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

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

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} <$ $\wedge\ \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

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

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

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

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

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

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

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

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

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

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(\ \ =2)}^{(\ \ +\boldsymbol{n}-D-s)}
$$

$$
\sum_{j_{ik}=j_s+j^{ik}} \sum_{(j^{sa}=j_{ik}+j_{sa}\ \ ^{ik})}^{(\ \ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\ \ 1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\ \ }^{n} \sum_{\ \ _{is}=\boldsymbol{n}+\mathbb{k}-\ \ 1)}^{\ \ -j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{\ \ j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{\ \ _{a}=\boldsymbol{n}-j^{sa}+1)}^{\ \ _{k}+j_{ik}-j^{\ \ }-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

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

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

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

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

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

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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

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

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-j_s-n_{ik}-j_{ik})!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

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

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$D > \boldsymbol{n} < n$$

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1}{(\boldsymbol{l_s} - j_s - 1)! \cdot (\quad - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \quad - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - \quad)!}$$

$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

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

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

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

$$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} \quad - \boldsymbol{n} - 1 \wedge$$

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

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

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

$$s \geq 4 \wedge \boldsymbol{s} = s + \quad$$

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

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=2)}$$

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

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

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

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

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

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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

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

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

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

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\cdots}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\cdots \boldsymbol{l}-1)!}{(\boldsymbol{l_s}-\cdots-\boldsymbol{l}+1)!\cdot(\cdots-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_s}-s)!}{(j^{sa}+\boldsymbol{l_i}-\cdots)!\cdot(j_i+\cdots-j^{sa}-s)!}\cdot$$

$$\frac{(D-\cdots)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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

$$\sum_{j_{ik}=\cdots+j_{sa}^{lk}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}}$$

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

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$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l} - 1 \wedge$

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

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

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

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

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

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

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

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

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

$$fz^{S}{}_{j_s,j_{ik},j^{sa},j_i} \sum_{\boldsymbol{n}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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

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

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

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

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_s}+j_{ik}-j_{sa}^{ik}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\ )}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(\boldsymbol{n}-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} \geq n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

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

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

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

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

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

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

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

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

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

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{\boldsymbol{l}=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{i}}^{j_{sa}^{ik}+1)}
$$

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

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{il}}^{} \quad \sum_{(j^{sa}=j_{sa}+}^{} \quad \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{}
$$

$$
{}^{n} \quad -j_s+1) \quad {}^{j_{ik}-\mathbb{k}_1}
$$

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

$$
+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i
$$

$$
\sum_{sa=\boldsymbol{n}-j^{sa}+1)}^{} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

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

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

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

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

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

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa})}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}^{}$$

$$\frac{(n_i+j_{sa}-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \geq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq \boldsymbol{l_{ik}} - 1 \wedge$

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

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

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

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{ik}} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} - \boldsymbol{l_{ik}} \geq 0 \wedge$

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

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

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

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

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

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

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

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

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

$$
\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-j_s-n_{ik}-j_{ik})!}\cdot
$$

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

$$
\frac{(n_{sa}-n_s-1)!}{(j_s-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

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

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-j_{sa}^{ik}+1)!}{(\boldsymbol{l_s}-j_s-j_{sa}^{ik}+1)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-j_{sa}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_{sa}-1)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

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

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

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

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

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

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

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

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

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

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

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

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

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

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

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

$$\frac{(n_s-1)!}{(\boldsymbol{n}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\;-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l} - 1 \wedge$

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

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

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

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} -$

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

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

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

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

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

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} - j_{sa} + 2)} \sum_{(j_s=2)}$$

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

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

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad \boldsymbol{l}-1)}{(\boldsymbol{l_s}-\quad -\boldsymbol{l}+1)\quad -2)!}\cdot$$

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

$$\frac{(D-\quad}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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

$$\sum_{j_{ik}\quad +j_{sa}^{lk}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

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$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq {}_{i}\boldsymbol{l} - 1 \wedge$

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

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

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

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

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

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

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

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

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

$$fz\left(j_{ik}, j^{sa}, j_i\right) \sum_{\boldsymbol{l}=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 2)} \sum_{(j_s=2)}$$

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

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

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

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

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

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

$$\sum_{j_{ik}=j_s}^{\ -1}\ (j^{sa}=\ +j_{sa}-j_{sa}^{ik})\ j_i=\ -j_{sa}$$

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(\ -\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \quad n \wedge \boldsymbol{l} \neq \quad \boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

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

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

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

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

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

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

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

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

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+}^{(\ )}
$$

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

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

$$
\sum_{(n_{sa}=\boldsymbol{n}}^{+j_{ik}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \ )! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

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

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

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

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

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

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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

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

$$\sum_{(n_{sa}=\boldsymbol{n}}^{(n_{ik}+j_{ik}} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}-j_i}$$

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

$$\frac{(n_{is} \quad n_{ik} - 1)!}{(j_{ik} - j_s \quad 1)! \cdot (n_{is} \quad j_s - n_{ik} - j_{ik})!} \cdot$$

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

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

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

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

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

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

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

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

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

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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

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

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!} \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s-\quad)!}\cdot \frac{(n_s-\quad-1)!}{+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot \frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot \frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(\quad+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!}$$

$$\frac{(\quad \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \quad - \boldsymbol{l} + 1)! \cdot (\quad - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i} \quad)!}{(D + j_i \quad \boldsymbol{a} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\quad)}$$

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

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

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

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \quad_{\boldsymbol{i}} \boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

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

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

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

$$fz^{S}_{j_{sa}^{ik}} = \sum_{\boldsymbol{l}} \sum_{(j_s \ldots - j_{sa}^{ik}+1)}^{(\ )}$$

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

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

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

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

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

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa})}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j_{sa}-j_s-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\cdots-\mathbb{k}_1-\cdots)!\cdot(\boldsymbol{n}-\cdots-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\cdots+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq \cdots + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq \cdots^{a} + j_{sa}^{ik} - j_{sa} \wedge$

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

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

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

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

$\boldsymbol{s}: \{j_{sa}^{s} \cdots_1, j_{sa}^{ik}, \mathbb{k}_2 \cdots, j_{sa}^{i}\} \wedge$

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

$\cdots z = 2 \cdots \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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

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

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

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

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

$$\frac{a} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

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

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

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

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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

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

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

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

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

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

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

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

$$S_{\cdot\cdot\cdot

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

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

$$\frac{(D-}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(}-$$

$$\sum^{(\ )}\sum_{-j_{sa}^{ik}+1)}$$

$$\boldsymbol{l_{ik}}-$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}\ \sum_{(j^{sa}+j_{sa}-j_{sa}^{ik})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$>\boldsymbol{n}\ldots\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$$

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

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

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

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

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

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

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

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

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{\boldsymbol{l}=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}}^{j_{sa}^{ik}+1)}
$$

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

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

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

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

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

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

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

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

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

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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

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

$$\sum_{(n_{sa}=n_{ik}-j^{sa}-}^{(\ )}\ \sum_{j^{sa}-j_i}$$

$$\frac{(n_i+\ ^{sa}-j_i-\ -\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1\ \mathbb{k}_2)!\cdot(\boldsymbol{n}\ j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}\ j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ \wedge\boldsymbol{l_i}\leq D+s-\ \wedge$

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

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

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

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

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

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

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

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

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}\ \sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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

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

$$\frac{(n_i \qquad -1)}{(j_s-2)\cdot(n_i-n_{is} \qquad +1)!}\cdot$$

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

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

$$\frac{a}{(j_i-j^{sa}-1)!}\cdot\frac{-n_s-1)!}{(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ \ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\ (\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

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

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

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

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

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

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

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

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

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

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

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

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-\quad\boldsymbol{l}+1)!\cdot(\quad-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\quad+j_{sa}^{ik}-1}^{(\quad)}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

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

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

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \quad_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

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

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

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

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \le D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

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

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

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

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

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

$$S_{j_s, j_{ik}, \ldots, j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{j_{sa}^{ik} + 1}^{(\ )} \sum_{(j^{s} \ldots j_i + j_{sa} - s)}^{\boldsymbol{l_{ik}} + s - \boldsymbol{l} - j_{sa}^{ik} + 1} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{n} \sum_{i = \boldsymbol{n} + \mathbb{k}}^{(n_i - j_s + 1)} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{n_{sa} + j^{sa} - j_i} \sum_{n_s = \boldsymbol{n} - j_i + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

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

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

$$\sum_{(j_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(\ )} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

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

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa})}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}^{}$$

$$\frac{(n_i+j_{sa}-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

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

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

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

$D + \boldsymbol{n} < \boldsymbol{l_i} \leq D - \boldsymbol{l_s} + s - 1 \wedge$

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

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

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

$> 4 \wedge s + \mathbb{k} \wedge$

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

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

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

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

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

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot$$

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

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

$$\frac{a - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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

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

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

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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

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

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

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

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

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

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

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

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

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

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

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

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

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

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

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

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

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

$$\frac{(\boldsymbol{l}-\boldsymbol{l_i})!}{(\boldsymbol{n}-\boldsymbol{l}-$$

$$\sum_{\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{=j_{sa}^{ik}+1}^{\boldsymbol{l}+1}\ \sum_{(\boldsymbol{l_i}+j_s}^{(\boldsymbol{l}-s+1)}$$

$$\sum_{=j_{sa}^{ik}+1}^{(}\ \sum_{j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

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

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

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

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

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

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s = j_i}^{} {}_{sa}^{ik}+1)$$

$$(\boldsymbol{l_{ik}} + j_{sa} \quad {}_{sa}^{ik}+1)$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \quad \sum_{\boldsymbol{n}+j_{sa}-D} \quad \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$(\quad +1)$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \quad \sum_{\boldsymbol{n}+\mathbb{k}-j_s+} \quad \sum_{j_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$\geq \boldsymbol{n} < \quad \wedge \boldsymbol{l} \neq \quad {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \quad \leq D - \boldsymbol{n} + 1 \wedge$

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

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

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

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

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

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

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

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

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

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

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

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

$$
{}^{+j_{ik}-j^{s}}{}^{)} \sum_{}^{n_{sa}+j^{sa}-j_i}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+1)}^{} \sum_{}^{-j_i+1}
$$

$$
\frac{(n_{}-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

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

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

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

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

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

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

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

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

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

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

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

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

$$\frac{a} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

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

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j$ $-s=\boldsymbol{l}$ $\wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-$ $\wedge j_{sa}^{s}=j_{sa}$ $1 \wedge$

$\boldsymbol{s}$: $\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{l}$

$s \geq 4 \wedge \boldsymbol{s}=s+$ $\wedge$

$\mathbb{k}_-: z=2 \wedge$ $=\mathbb{k}_1+$ $\Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1}\ \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + \boldsymbol{n} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l}_s - \boldsymbol{l} - 1)!}{(j_s - j_s - \boldsymbol{l} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l}_{sa} + j_{sa}^{ik} - \boldsymbol{l}_{ik} - j_{sa})!}{(j_{ik} + \boldsymbol{l}_{sa} - j_{sa} - \boldsymbol{l}_{ik})! \cdot (j_{sa}^{ik} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l}_i)!}{(D + \boldsymbol{n} - \boldsymbol{n} - \boldsymbol{l}_i)! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = \boldsymbol{l}_i + \boldsymbol{n} + j_{sa}^{ik} - D - s}^{\boldsymbol{l}_i + j_{sa} + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\boldsymbol{l}_i + j_{sa} - \boldsymbol{l} - s + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-\boldsymbol{l}+1)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{j_{ik}=\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{(\ )}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-\boldsymbol{n}+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\boldsymbol{n}>\boldsymbol{n}-\boldsymbol{l}\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

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$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}\ \ +1)}^{\ \ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=\ \ \boldsymbol{n}+j_{sa}-D\ \ )}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+\ \ )} \sum_{\ \ +s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\ \ \mathbb{k}-j_s+1)}^{(n_i-j_s\ \ )} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(\ \ +j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}_1+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}\ \sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j_{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+j_i-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \mathbb{k} >= 1 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j_{sa} = j_{sa}^{ik}-1 \wedge$

$\cdots\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s-\mathbb{k} \wedge$

$\mathbb{k}_2 \geq 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}\ \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_s - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j_{sa} - \boldsymbol{l_{ik}})! \cdot (j_{sa}^{ik} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

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$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{\dots, j_{ik}, j^{sa}, \dots} = \sum_{k=\boldsymbol{l}}^{(\dots - D - s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\dots + j_{sa}^{ik} - 1}^{(\boldsymbol{l_i} + \dots - \boldsymbol{l} - s + 1)} \sum_{\dots + \boldsymbol{n} + j_{sa} - D - s)}^{} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2 - j_{ik}+1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_i}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-\boldsymbol{l_{ik}}} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa})}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}_1}^{n} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_{is}-j_s+1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}} \sum_{-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \sum_{\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{s}}$$

$$\frac{(n_i + j - \mathbb{k}_1 - j_{sa})!}{- \boldsymbol{n} - \mathbb{k}_1 - j_s)! \cdot (\quad j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D - j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \ D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} \ 1 \leq j_{ik} \leq \ ^{a} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + \ - j_{sa}^{ik} \leq j \ \leq j_i + j_{sa} - s \wedge \ ^{sa} + \ - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \ \wedge \boldsymbol{l_{sa}} \ ^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \ - \boldsymbol{n} < \boldsymbol{l_{sa}} \ D + \boldsymbol{l_s} \ - \boldsymbol{n} - 1 \wedge$

$\geq \boldsymbol{n} < \ \wedge I = \mathbb{k} > = \ \wedge$

$j_{sa} \leq \ ^{i}_{a} - 1 \ ^{ik} \ a - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1 \ ^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$\geq 4 \wedge \boldsymbol{s} \ s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{i}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} - j_{} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_{} - 1)! \cdot (n_{is} + j_{} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\boldsymbol{l_{sa}}+j^{sa}-\boldsymbol{l_{ik}})!\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\ \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}.$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{j_{ik} = j_{sa}^{ik} - j_{sa}} \sum_{j_{ik} = j_{sa}^{ik} + 1}^{(\ )} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{\boldsymbol{l_s} + s - \boldsymbol{l}} \sum_{j_i = \boldsymbol{l_{sa}} + \boldsymbol{n} + s - D - j_{sa}}^{n} \sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{(n_i - j_s + 1)} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{n_{sa} + j^{sa} - j_i} \sum_{n_s = \boldsymbol{n} - j_i + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!}.$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}.$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_{s}-1)!}{(n_{s}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l}-\boldsymbol{l_i})!}{(\boldsymbol{n}-\boldsymbol{l}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\sum_{=j_i+j_{sa}-s)}^{(\quad)}\sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_{s}-1)!}{(n_{s}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} + j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_i = j_i + j_{sa} - s)}^{(\ )} \sum_{j_i = \boldsymbol{l_s} + \boldsymbol{n} + s - D - j_{sa}}^{\boldsymbol{l_s}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i + \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} - 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{j_i=}^{}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_{}}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{}}^{}
$$

$$
\sum_{(}^{+j_{ik}-j^{sa}} \sum_{=\boldsymbol{n}-j^{sa}+1)}^{) n_{sa}+j^{sa}-j_i} \sum_{}^{-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{} - n_{ik} - 1)!}{(j_{ik} - \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{s} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is}}$$

$$\frac{(n_{is} - n_{ik}}{(j_{ik} - j_s}$$

$$\frac{(n_{ik} - n_{sa} - 1)}{(j^{sa} - j_{ik} - 1)! \cdot (}$$

$$\frac{a} - n_s - 1)!}{(j_i - j^{sa} - 1)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\boldsymbol{l_{ik}} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}$ $1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-$ $\wedge j_{sa}^{s}=j_{sa}$ $1 \wedge$

$\boldsymbol{s}$: $\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{l}$

$s \geq 4 \wedge \boldsymbol{s}=s+$ $\wedge$

$\mathbb{k}_-: z=2 \wedge$ $=\mathbb{k}_1+$ $\Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + \boldsymbol{n} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l}_s - \boldsymbol{l} - 1)!}{(j_s - j_s - \boldsymbol{l} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + \boldsymbol{n} - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l}} \sum_{(j^{sa} = \boldsymbol{l_s} + j_{sa} - \boldsymbol{l} + 1)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\right.}$$

$$\frac{(D-}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(}-$$

$$\sum_{(}^{(\ )}\sum_{j_{sa}^{ik}+1)}$$

$$(\boldsymbol{l_{sa}}-\boldsymbol{l})$$

$$\sum_{=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$(n_i-1)$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$>\boldsymbol{n}-\ \wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1\wedge$$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{\boldsymbol{l}=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}}^{j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1} \quad \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-}^{(\ \ \boldsymbol{l}+1)} \quad \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{}^{n} \quad \sum_{}^{-j_s+1)} \quad \sum_{}^{j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{} \quad \sum_{=\boldsymbol{n}+\mathbb{k}-j_s}^{)} \quad \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{}
$$

$$
+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i
$$

$$
\sum_{sa=\boldsymbol{n}-j^{sa}+1)}^{} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_{i}=j^{sa}+s-j_{sa}}^{j_{ik}+j_{sa}-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}_1+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}\ \sum_{\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_{sa}}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}^{} {}_{+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1 \quad -j_s)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)\quad (\boldsymbol{n}+j^{sa} \quad -j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l}_s-\boldsymbol{l}-1)!}{-\boldsymbol{l}+)!\cdot(j_s-2)!} \cdot$$

$$\frac{(D}{(D+-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j^{ik} \leq j_{ik} \leq +j_{sa}^{ik}-j \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i -j_{sa}-s \wedge j^{sa} -j_{sa}-j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l} -j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_ -\boldsymbol{n}<\boldsymbol{l_{sa}} D+\boldsymbol{l_s}+j_{sa}- -1 \wedge$

$D \geq \boldsymbol{n}<n \wedge = \mathbb{k} >= \wedge$

$j_{sa} < j_{sa}^{i}-1 \wedge j_{sa}^{ik} j_{sa}-1 = j_{sa}^{ik}-1 \wedge$

$\in \{j_{sa}^{s}, \mathbb{k} {}_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots {}_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = \mathbb{k} \wedge$

$\mathbb{k}_2 = \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_s - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j_{sa} - \boldsymbol{l_{ik}})! \cdot (j_{sa}^{ik} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa}}^{\boldsymbol{l_s} + \boldsymbol{n} - \boldsymbol{l}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

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$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz^{\mathbb{S}} \; j_{ik}, j^{sa}, j_i \; \sum_{} \sum_{(j_s=2)}^{(\boldsymbol{l_{sa}} \; D - j_{sa})}$$

$$\sum_{j_{ik}=j_s+j_{sa}-1}^{} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(j_{sa}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}+j_{sa}^{ik}+2)} \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-\boldsymbol{l}-j_{sa}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_s}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{} \cdot$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}-j_s+1}^{n} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_{ik}-\mathbb{k}_1}^{} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{} \cdot$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \cdot$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+}^{} \sum_{-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}^{}$$

$$\frac{(n_i+j \qquad \mathbb{k}_1-\qquad -j_{sa})!}{(\qquad -\qquad -\mathbb{k}_1-\qquad)!\cdot(\qquad -j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\qquad +1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-\qquad j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq \qquad a+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+\qquad -j_{sa}^{ik} \leq j^{\qquad} \leq j_i+j_{sa}-s \wedge \qquad -j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 \leq \qquad \wedge \boldsymbol{l_{sa}}+\qquad -j_{sa} \geq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+\qquad -\boldsymbol{n}<\boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+\qquad -\boldsymbol{n}-1 \wedge$

$\qquad \geq \boldsymbol{n} < \qquad \wedge I=\mathbb{k}>= \qquad \wedge$

$j_{sa} \leq j_{\qquad}-1 \wedge j^{\qquad}_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, \qquad \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$\qquad >4 \wedge \qquad s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)!\cdot(n_i-n_{is}}$$

$$\frac{(n_{is}-n_{ik}}{(j_{ik}-j_s-}$$

$$\frac{(n_{ik}-n_{sa}-1)}{(j^{sa}-j_{ik}-1)!\cdot(}$$

$$\frac{{}_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{{}_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\boldsymbol{l_{sa}}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}\ \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\ )} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_{i}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_{i})!}\cdot$$

$$\frac{(n_{s}-1)!}{(n_{s}+j_{i}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\text{[illegible]}}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_{s}-\boldsymbol{l}+1)\text{[illegible]}(j_{s}-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\text{[illegible]}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\text{[illegible]}^{sa}+j_{sa}^{ik}-\text{[illegible]}j_{sa})!}\cdot$$

$$\frac{(D\text{[illegible]}\boldsymbol{l_i})!}{\text{[illegible]}\boldsymbol{n}-\boldsymbol{l_i}\text{[illegible]}(\boldsymbol{n}-j_{i})!}$$

$$\sum_{\text{[illegible]}=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{\text{[illegible]}=j^{sa}+j_{sa}}\sum_{\text{[illegible]}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{\text{[illegible]}i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_{s}-\boldsymbol{l}+1)!\cdot(j_{s}-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{i}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1\leq\boldsymbol{l}\leq\ {}_{i}\boldsymbol{l}-1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S}_{j_{ik}, j_{sa}^{ik}, j_{sa}^{i}} = \sum_{\boldsymbol{l}} \sum_{(j_s = \boldsymbol{l}_i - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{j_{sa}^{ik} + j_{sa}^{ik} - \boldsymbol{l}} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\ )} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\;-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )}\sum_{(j^{sa}=j_i+j_{sa}}\sum_{}^{s+s-\boldsymbol{l}}\sum_{}^{\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_i-j_s+1)}^{(\ )}\sum_{n_{ik}=}\sum_{}^{j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=}^{(\ )}\sum_{j_{ik}-j^{sa}}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_{}-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\mathbb{k}_1-\mathbb{k}_{}\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\boldsymbol{l}\wedge\boldsymbol{l_s}\leq\boldsymbol{n}-\boldsymbol{n}-1\wedge$

$D+\boldsymbol{l}_{}s-\boldsymbol{n}-\boldsymbol{l_i}+\leq\boldsymbol{l}\leq{}_{\boldsymbol{i}}\boldsymbol{l}-1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\;{}_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}-{}_s-j_{sa}^{ik}\leq j^{}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+{}=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$\boldsymbol{l}<\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=}^{\ \ +s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-}^{n_{is}+j_s-\ \ -\mathbb{k}_1}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{\ \ }_{\ \ }\ \ )} \sum_{-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_{\ \ }-n_{is}-1)!}{(j_s-2)!\cdot(n_{\ \ }-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{\ \ }-n_{ik}-1)!}{(j_{ik}-j_{\ \ }-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{\ \ }-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(j_s-\boldsymbol{l}+)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-)!}{(D+j_s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s \quad j_{sa}^{ik}-1 \leq j_{ik} \quad j^{sa}+j_{sa}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa} \quad \wedge j^{sa}+s \quad j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} \quad {}^{ik}+1=\boldsymbol{l_s} \quad +j_{sa}^{ik}-j_{sa} \quad \wedge \quad +j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \quad s-\boldsymbol{n}<\quad \leq D+\boldsymbol{l_s} \quad s-\boldsymbol{n}-1 \wedge$

$D \quad \boldsymbol{n}<n \wedge I=\mathbb{k} \quad =0 \wedge$

$\quad a \leq j_{sa}^{i} \quad 1 \wedge j_{sa}^{ik}=j_s \quad -1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s} \quad \mathbb{k}_1, j_{sa}^{ik} \quad \quad , j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} \quad s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \quad \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{i}}{(j_{ik}-j_{s}}$$

$$\frac{(n_{ik}-n_{sa}-1)}{(j^{sa}-j_{ik}-1)!\cdot(}$$

$$\frac{(j_i-j^{sa}-1)!}{(j_i-j^{sa}-1)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\boldsymbol{l_{ik}}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l}_{\boldsymbol{i}}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{$ $\leq j^{sa}+j_{sa}^{i}$ j_{sa}

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s$ $^{sa}+s-j_{s}$ $\leq j_i \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>$ $\wedge \boldsymbol{l_i}+j_{sa}-s$ $\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1$ $j_{sa}^{s}=j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2$ $, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=$ $+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2 =$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\boldsymbol{l_{sa}} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik} + 2)} \sum_{(j_s = \boldsymbol{l_i} + \boldsymbol{n} - D - s + 1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ \ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{j_{ik}=j_{sa}^{ik}+1}^{(\ \ )}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}\sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{n}\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}-j_i}\sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} -} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} \right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i}) \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = (} \sum_{\boldsymbol{l_{ik}} + s - \boldsymbol{l} - j_{sa}^{ik} + 1} \sum_{j_i = \boldsymbol{l_{sa}} + \boldsymbol{n} + s - D - j_{sa}}$$

$$\sum_{} \sum_{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S}_{j_{sa}, j_{ik}, j_{sa}^{ik}} = \sum_{\boldsymbol{l}} \sum_{(j_s = \boldsymbol{l}_{sa} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_s} + j_{sa}^{ik}} \sum_{(j^{sa} = j_{sa} - s)}^{(\ )} \sum_{j_i = \boldsymbol{l_{sa}} + \boldsymbol{n} + s - D - j_{sa}}^{\boldsymbol{l_{sa}} + s - \boldsymbol{l} - j_{sa} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\ )} \sum_{j_i = \boldsymbol{l_s} + s - \boldsymbol{l} - j_{sa}}^{\boldsymbol{l_s} - \boldsymbol{l}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_i = \boldsymbol{n} + \mathbb{k} - j_{sa})}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{sa} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{sa} + j_{ik} - j^{sa} - j_{sa})}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} - 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq \boldsymbol{l_i} - 1 \wedge$

$1 \leq j_s \leq j_{ik} + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

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$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=}^{\quad +s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-}^{n_{is}+j_s-\quad-\mathbb{k}_1}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+1)}^{(\quad+j_{ik}-j^{\quad}\ n_{sa}+j^{sa}-j_i} \sum_{\quad-j_i+1}
$$

$$
\frac{(\quad\ n_{is}-1)!}{(j_s\quad 2)!\cdot(\quad\ n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n\quad\ -n_{ik}-1)!}{(j_{ik}\quad j_s-1\quad\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{s}\quad-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 \quad - j_{sa}!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2) \quad (\boldsymbol{n} + j^{sa} - \quad j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} \quad \boldsymbol{l} - 1)!}{\quad - \boldsymbol{l} + \quad)! \cdot (j_s - 2)!}$$

$$\frac{(D - \quad}{(D + j \quad \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq \quad \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s \quad j_{sa}^{ik} - 1 \leq j_{ik} \quad j^{sa} + j_{sa} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} \quad \wedge j^{sa} + s \quad j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} \quad ^{ik} + 1 = \boldsymbol{l_s} \quad + j_{sa}^{ik} - j_{sa} \quad + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \quad j_{sa} - \boldsymbol{n} \quad \leq D \quad + j_{sa} \quad - 1 \wedge$

$D \quad \boldsymbol{n} < n \wedge I = \mathbb{k} \quad = 0 \wedge$

$\quad a \leq j_{sa}^{i} \quad 1 \wedge j_{sa}^{ik} = j_s \quad - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s} \quad \mathbb{k}_1, j_{sa}^{ik} \quad , j_{sa}^{i}\} \wedge$

$s \quad 4 \wedge \boldsymbol{s} \quad s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \quad \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{i}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s + 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{ik} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l}$$

$$(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq {}_{i}\boldsymbol{l} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} >$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} -$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} =$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(\boldsymbol{l_{sa}}+j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}\ \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\ )} \sum_{j_i = s+1}^{\boldsymbol{l_s} + s - \boldsymbol{l}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-$$

$$\frac{(\boldsymbol{l}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}-\boldsymbol{l}+$$

$$\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad)}\ \sum_{j_{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\ \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i\quad+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{\left(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s}\right)! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{\ }}^{(\ )} \sum_{(j^{sa} = j_{\ }}^{\boldsymbol{l_s} + s - \boldsymbol{l}} \sum_{\ s+1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{\ } + \mathbb{k}}^{(n_i - j_s + 1)} \sum_{n_{ik} = \ } \sum_{\ - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \ } \sum_{\ - j^{sa} - \ } \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_{\ } - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \ - \mathbb{k}_1 - \mathbb{k}_{\ } \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \ \boldsymbol{l} \wedge \boldsymbol{l_i} \leq \ + s \ \boldsymbol{n} \wedge$

$1 \leq j_{\ } \leq j_{ik} - j_{sa}^{ik} + 1 \ j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \ \leq j^{sa} \leq \ + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} \ + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \ \boldsymbol{l} = \mathbb{k} >= 0 \wedge$

$j_{\ } - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{sa} + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s - \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = {}^{ik}_{a} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_{s}-1)!}{(n_{s}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}-1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}-1)!\cdot(j_{ik}-j_s-$$

$$\frac{(\boldsymbol{l}-\boldsymbol{l_i})!}{(\boldsymbol{n}-\boldsymbol{l}-$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_s=2)}^{-\boldsymbol{l}+1)}$$

$$\sum_{=\boldsymbol{l_s}+j_{sa}^{ik}}^{k-\boldsymbol{l}+1} \sum_{j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_{s}-1)!}{(n_{s}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\sum_{j_{ik}=j_{ik}+j_{sa}-j_s}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ )}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\boldsymbol{l_s}\geq\boldsymbol{n}<\boldsymbol{l}\wedge\boldsymbol{l}\neq\boldsymbol{l_i}\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_s}-j_{sa}^{ik}-1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )} \sum_{j_i=j^{sa}+s-j_s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+}^{(n_i-j_s+1)} \sum_{\boldsymbol{n}+\mathbb{k}}^{n_{is}-j_{ik}-\mathbb{k}_1} j_{ik}+1
$$

$$
(n_{ik}+ \quad -j^{sa}-\mathbb{k}_2)\ n_{sa}+ \quad j_i
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is}}{(j_s-2)\ (n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{{}_{is}-n_{ik}\ 1)!}{(j_{ik}-j_s-1)\ (n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n\ \ -n_{sa}-1)!}{{}_{sa}-j_{ik}\ \ 1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{{}_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}
$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)}$$

$$\frac{(\boldsymbol{l}_s-\boldsymbol{l}-1)!}{\cdot(j_s-2)!}$$

$$\frac{(D}{(D+}$$

$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$$

$$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 < j_{ik} \leq j_{sa}+j_{sa}^{ik}-j_s \wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_{ik}+j_{sa}-s \wedge j^{sa}-j_{sa}+j_i \leq \boldsymbol{n} \wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-1 = \boldsymbol{l_{ik}} \wedge \boldsymbol{l}_{\boldsymbol{i}}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$$

$$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq \boldsymbol{l}+\boldsymbol{l_s}+s-\boldsymbol{n} \wedge$$

$$D \geq \boldsymbol{n} < n \wedge \quad = \mathbb{k} >= \wedge$$

$$j_{sa} < j_{sa}^{i}-1 \wedge j_{sa}^{ik} \quad j_{sa}-1 \quad = j_{sa}^{ik}-1 \wedge$$

$$\quad \{j_{sa}^{s}, \quad j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots j_{sa}^{i}\} \wedge$$

$$s \geq 4 \wedge \boldsymbol{s} = \quad \mathbb{k} \wedge$$

$$\mathbb{k}_2 \quad = \quad \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{sa} + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s - \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{-1)!}{(n_s + \quad - \boldsymbol{n} - 1)$$

$$\frac{(\quad - \boldsymbol{l} - 1)!}{- j_s - \boldsymbol{l}$$

$$\frac{(\boldsymbol{l_{ik}}$$

$$\frac{(D$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{2\cdots,j_{ik},j^{sa},j_{\cdots}} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{} \sum_{j_{ik}=j_{\cdots}}^{(\boldsymbol{l_{\cdots}}-j_{sa}-\boldsymbol{l})} \sum_{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\boldsymbol{l}}^{(j_s-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}}^{j_{sa}-\boldsymbol{l}-s+1}\ \sum_{(j^{sa}+j_{sa}-\boldsymbol{l}+1)}^{j_i-j_s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{sa}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}+j_{sa}-j_i)}^{(\ )} \sum_{j_i=j^{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j_i \leq j_i+j_{sa}-1 \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}-j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_s} \leq D+\boldsymbol{n}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

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$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} -j_{ik}+1$$

$$\sum_{(n_{sa}=\boldsymbol{n}}^{(n_{ik}+j_{ik}-j} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - \quad j_s + 1)!} \cdot$$

$$\frac{(n_{is} \quad _{ik} - 1)!}{(j_{ik} - j_s \quad 1)! \cdot (n_{is} \quad j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} \quad n_{sa} - 1)!}{(j^{sa} \quad _{ik} - 1)! \quad n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{\quad - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{sa} + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s - \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l}_{\boldsymbol{s}}-\boldsymbol{l}-1)!}{(\boldsymbol{l}_{\boldsymbol{s}}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l}_{\boldsymbol{ik}}-\boldsymbol{l}_{\boldsymbol{s}}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l}_{\boldsymbol{ik}}-\boldsymbol{l}_{\boldsymbol{s}}-j_{sa}^{ik}-1)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l}_{\boldsymbol{i}}-\boldsymbol{n}+1)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l}_{\boldsymbol{i}})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l}_{\boldsymbol{s}}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l}_{\boldsymbol{i}}+\boldsymbol{n}-D-s+1)}^{}$$

$$\sum_{j_{ik}}^{j_{sa}^{ik}-\boldsymbol{l}-s+1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\quad-j_i)!}$$

$$\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s}^{(\boldsymbol{l_s}-\quad)}$$

$$\sum_{j_{ik}=j_s+\quad-1}^{(\quad)}\left(j^{sa}=\quad+j_{sa}-j_{sa}^{ik}\right)j_i=\quad-j_{sa}$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{n}\left(n_{is}=\boldsymbol{n}+\quad-j_s+1\right)\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(\quad-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D>\quad m\wedge\boldsymbol{l}\neq\quad\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_s}+s\quad\boldsymbol{n}-\boldsymbol{l_i}+1\leq\boldsymbol{l}\leq\quad\boldsymbol{l}-1\wedge$

$1\quad\quad j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1\wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{j_s=2)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{} \sum_{} \sum_{j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{n_i=\boldsymbol{n}+} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}
$$

$$
\sum_{} \sum_{} \sum_{n_{sa}+j^{sa}-j_i}
$$

$$
\sum_{a=\boldsymbol{n}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-}^{} \sum_{-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \sum_{k_2)} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j \quad \mathbb{k}_1-\quad -j_{sa})!}{(\quad -n_i-\mathbb{k}_1-\quad)!\cdot(\quad -j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa} \quad 1 \leq j_{ik} \leq \quad a+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+ \quad -j_{sa}^{ik} \leq j \quad j_i+j_{sa}-s \wedge \quad -j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 \quad \wedge \boldsymbol{l_{sa}}+ \quad -j_{sa} \quad \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+ \quad -\boldsymbol{n}<\boldsymbol{l_{sa}} \quad D+\boldsymbol{l_s}+ \quad -\boldsymbol{n}-1 \wedge$

$\quad \geq \boldsymbol{n} < \quad \wedge I=\mathbb{k}>= \quad \wedge$

$j_{sa} \leq j \quad -1 \wedge \quad _{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, \quad ^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$\quad >4 \wedge \quad s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)!\cdot(n_i-n_{is}}$$

$$\frac{(n_{is}-n_{ik}}{(j_{ik}-j_{}}$$

$$\frac{(n_{ik}-n_{sa}-1)}{(j^{sa}-j_{ik}-1)!\cdot(}$$

$$\frac{}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)!}{(j_s+j_{ik}-j_{ik}-\boldsymbol{l}+1)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(J^{sa}=j_i+j_{sa}-s)}^{(\ )}\ \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}-1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}-1)!\cdot(j_{ik}-j_s-$$

$$\frac{(\boldsymbol{l}-\boldsymbol{l_i})!}{(\boldsymbol{n}-\boldsymbol{l}-$$

$$\sum_{k=\boldsymbol{l}}^{}\sum_{(j_s=2)}^{-\boldsymbol{l}+1)}$$

$$\sum_{}^{}\sum_{}^{-\boldsymbol{l}+1)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - j_{sa})}^{(\ j_{sa} - \boldsymbol{l})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s)}^{(\ j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i + \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=\boldsymbol{n}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_{is}+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}+1)} \sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-} \sum_{=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - 1)}{(j_s - 2)\ (n_i - n_{is} - 1)!}\cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)\ (n_{is} + j_s - n_{ik} - j_{ik})!}\cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!}\cdot$$

$$\frac{a} - n_s - 1)!}{(j_i - j^{sa} - 1)!\ (n_{sa} + j^{sa} - n_s - j_i)!}\cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!}\cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l}_$$

$$(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} <$ $\wedge \boldsymbol{l_i}+$ $-s=$ $\wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}$ $1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-$ $\wedge j_{sa}^{s}=j_{sa}$ $1 \wedge$

$\boldsymbol{s}$: $\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{l}$

$s \geq 4 \wedge \boldsymbol{s} = s+$ $\wedge$

$\mathbb{k}_-: z = 2 \wedge$ $= \mathbb{k}_1 +$ $\Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + \boldsymbol{n} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(j_s - j_s - \boldsymbol{l} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + \boldsymbol{l_i})!}{(D + \boldsymbol{n} - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{sa}}+j_{sa}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{(D-$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}\sum_{}^{}$$

$$\sum_{=j_s+j_{sa}^{ik}-1}^{}\ \sum_{}^{}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-1)}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}^{}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\boldsymbol{n}>\boldsymbol{n}<\ \wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$D+j_{sa}^{ik}-\boldsymbol{n}<\boldsymbol{l_{ik}}\leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1\wedge$$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{j_{ik}-j_{sa}^{ik}+1)} \sum_{=2)}$$

$$(\quad) \qquad \boldsymbol{l_s}+$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_{ik}+j_{sa}-s)} \sum_{j_i} {}_{+s+\boldsymbol{n}-D-j_{sa}^{ik}}$$

$$n \qquad -j_s+1) \qquad j_{ik}-\mathbb{k}_1$$

$$\sum_{n_i=\boldsymbol{n}+} \sum_{=\boldsymbol{n}+\mathbb{k}-} {}_{1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}$$

$$+j_{ik}-j^{sa}-\mathbb{k}_2) \; n_{sa}+j^{sa}-j_i$$

$$\sum_{sa=\boldsymbol{n}-j^{sa}+1)} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{sa}=}^{(n_{ik}+j_{ik}} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}-j_i}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (\quad j_s + 1)!} \cdot$$

$$\frac{(n_{is} \quad n_{ik} - 1)!}{(j_{ik} - j_s \quad 1)! \cdot (n_{is} \quad j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} \quad n_{sa} - 1)!}{(j^{sa} \quad j_{ik} - 1)! \quad n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{\quad - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{ik}}+s+\boldsymbol{n}-D-j_{sa}^{ik}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \geq j_{ik} \leq j^{sa}-j_{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j_{ik}+s-j_{sa} \leq j_i < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l}-j_{sa}-s = \wedge$

$D+j_{sa}^{ik}-\boldsymbol{n} < \boldsymbol{l_{ik}} \leq D+j_{sa}^{ik}-\boldsymbol{n}-\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1$

$\boldsymbol{s}\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}, \mathbb{k}_2, j_{sa}, \ldots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k}$

$\mathbb{k}_z : z = \wedge \mathbb{k} = \mathbb{k}_1 + \Rightarrow$

$$fz S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot \frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot \frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot \frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)!}{(j_s+j_{sa}^{ik}-j_{ik}-\boldsymbol{l})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}-j_i} \sum_{n_s=\boldsymbol{n}-j_i+1} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-1)!\cdot(j_{ik}-j_{sa}^{ik}+1)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_s^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

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$1 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \le D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s,\ldots,j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{\left(j_{ik}-j_{sa}^{ik}+1\right)} \sum_{(j_s=2)}^{\quad}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+\boldsymbol{n}-D\ \left(j^{sa}-j_{sa}+j_{sa}-j_{sa}^{ik}\right)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\quad}
$$

$$
\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_s}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-}^{n_i-j_s+} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{a=\boldsymbol{n}-j^{sa}+1)}^{k+j_{ik}-j-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}+s)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j_{sa}-j_s-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j_i+j_{sa}-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \leq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}^{ik}-\boldsymbol{n} < \boldsymbol{l_{ik}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 1 \wedge$

$j_{sa} \leq j_i-1 \wedge j_{sa}^{s} \leq j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$z \geq 4 \wedge \mathbb{k} \geq s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,\,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik})} \sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is}}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)}{(j^{sa} - j_{ik} - 1)! \cdot (+ j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}-j_{sa}^{ik})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ \ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}-1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _i\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq \ _i\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa})}^{(j_{sa}=j_{sa},j_i)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}^{\boldsymbol{l_{ik}}-\boldsymbol{l}} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-n_{is}+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j^{sa}=j_{sa}-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{i}=\boldsymbol{n}+\mathbb{k}-j_{ik})}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{i}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} - 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq \boldsymbol{l_i} - 1 \wedge$

$1 \leq j_s \leq j_{ik} + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < \boldsymbol{l} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ \ )} \sum_{j_i=}^{+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-}^{n_{is}+j_s-\mathbb{k}_1}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa})\ n_{sa}+j^{sa}-j_i} \sum_{-j_i+1}
$$

$$
\frac{(n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{ik}-1)!}{(j_{ik}-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}
$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1 \quad -j_s)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2) \quad (\boldsymbol{n}+j^{sa} \quad -j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l}_s-\boldsymbol{l}-1)!}{\quad -\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D}{(D+\quad -\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq \quad -1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_{\quad} \quad j_{sa}^{ik}-1 \leq j_{ik} \quad j^{sa}+j_{sa}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa} \quad s \wedge j^{sa}+s \quad j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} \quad ^{ik}+1 > \boldsymbol{l_s} \quad _{sa}+j_{sa}^{ik}-j_{sa} \quad _{ik} \wedge \quad +j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \quad j_{sa}-\boldsymbol{n} \quad _{sa} \leq D \quad \boldsymbol{l}_{\quad}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k}_{\quad} = 0 \wedge$

$j_{sa} \leq j_{sa} \quad 1 \wedge j_{sa}^{ik} = j_s \quad -1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik} \quad j \quad , j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge s \quad s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \quad \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{\boldsymbol{n}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-1}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_{sa}-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l}_$$

$$(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\ (\boldsymbol{n}-j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{$ $\leq j^{sa}+j_{sa}^{i}$ j_{sa}

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s$ $j^{sa}+s-j_{s}$ $\leq j_i \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=$ $\wedge \boldsymbol{l_i}+j_{sa}-s$ $\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1$ $j_{sa}^{s}=j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2$ $, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} =$ $+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2 =$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(\boldsymbol{n} - 1)!}{(n_s + \boldsymbol{n} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz_{j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+\mathbb{k}-D-j_{sa}} \left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right) \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\boldsymbol{l_{ik}}=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{j_{is}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(j_s+1)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D > \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}^{ik}-\boldsymbol{n} < \boldsymbol{l_{ik}} \leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1 \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{j_s=2)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_{sa}+j_{sa}-s)} \sum_{j_i+\boldsymbol{n}+s-D-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+1} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}
$$

$$
\sum_{j_{sa}=\boldsymbol{n}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=\boldsymbol{l_{ik}}+s+\boldsymbol{n}-D-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \sum_{n_s=n_{sa}+j^{s}}$$

$$\frac{(n_i+j \quad \mathbb{k}_1-\quad -j_{sa})!}{(\quad -\quad -\mathbb{k}_1-\quad)!\cdot(\quad -j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \geq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq \quad -1 \wedge$

$1 \leq j \leq j_{ik}-j_{sa}^{ik}+ \wedge j_s+j_{sa}^{ik}-1 \quad \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \quad \leq j_i \quad _{sa}-s \quad ^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} \quad _{sa}^{ik}+1>\boldsymbol{l_s} \wedge \quad +j_{sa}^{ik}- \quad _{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}^{ik}- \quad \leq \boldsymbol{l_{ik}} \leq D \quad \boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1 \wedge$

$D \geq \quad \leq n \wedge I \quad \geq 0 \wedge$

$j_{sa} \leq j_{sa}^{i} \quad \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\quad \{j_{sa}^{s}, \mathbb{k} \quad _{sa}^{i}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}+1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}-j^{sa}-j_i}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-1)!\cdot(\boldsymbol{l}-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{sa} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}-j_{sa} = \boldsymbol{l_{ik}}-\boldsymbol{l_i}+j_{sa}-j_{sa} \leq \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}^{ik}-\boldsymbol{n} < \boldsymbol{l_{ik}} \leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \boldsymbol{n} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}^{s}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{s}, \cdots, j_{sa}^{i}\}$

$s \geq 4 \wedge \boldsymbol{n} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \boldsymbol{n} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_i-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\boldsymbol{n}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s-\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = {}^{ik}_{a} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=s+1}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-\boldsymbol{l}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\quad+j_{sa}^{ik}-\quad-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-\quad)!\cdot(j_i+\quad-j^{sa}-s)!}$$

$$\frac{(D-\boldsymbol{l_i}\quad)}{(D+j_i\quad\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i=\boldsymbol{l_{ik}}+j_{sa}^{ik}-\boldsymbol{l}-s+2}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{j_i=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j_{ik}=j_i+j_{sa}-s)}\sum_{j_i=s+1}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-\boldsymbol{l}-s+1}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\boldsymbol{n} > \boldsymbol{n}-\mathbb{k} \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{\boldsymbol{l}=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_i}^{} \sum_{j_{sa}^{ik}+1)}
$$

$$
\sum_{j^{sa}+j_{sa}^{i}} \sum_{(j_i+j_{sa}-s)} \sum_{-\boldsymbol{l}}
$$

$$
\sum_{ik+1} \sum_{(j^{}+1)} \sum_{j_i=s+1}
$$

$$
\sum_{-j_s+1)} \sum_{j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{=\boldsymbol{n}+\mathbb{k}-j_s)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}
$$

$$
+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i}
$$

$$
\sum_{sa=\boldsymbol{n}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{sa}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{\boldsymbol{l_s}=\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\boldsymbol{n}=\boldsymbol{n}}^{(n_i-j_s+1)} \sum_{n_{ik}=\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j_{ik}+1)}^{(n_{is}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \sum_{k_2)\ n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j \quad \mathbb{k}_1-\quad -j_{sa})!}{(\quad -\quad -\mathbb{k}_1-\quad)!\cdot(\quad \quad -j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\quad +1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-\quad j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \geq 0 + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq \quad a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + \quad - j_{sa}^{ik} \leq j^{\quad} \leq j_i + j_{sa} - s \wedge \quad a \quad - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \quad \wedge \boldsymbol{l_{sa}} \quad ^{ik} - j_{sa} \quad \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \quad < n \wedge I = \mathbb{k} \quad = 0 \wedge$

$\quad sa \leq j_{sa}^{i} \quad 1 \wedge j_{sa}^{ik} = j_s \quad - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_s^s \quad \mathbb{k}_1, j_{sa}^{ik}, \quad \quad , j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} \quad s + \mathbb{k} \wedge$

$\quad : z = 2 \quad \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} - 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\boldsymbol{l_{ik}} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-\boldsymbol{l}-s+2)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_i-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-\boldsymbol{l}-s+1)} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l}$$

$$(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} +$ $- s >$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} -$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s\ , j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad \boldsymbol{l}-1)}{(\boldsymbol{l_s}-\quad -\boldsymbol{l}+1)\quad -2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\quad)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}\quad (j^{sa}+j_{s}\quad -j_{ik}-j_{sa})!}$$

$$\frac{(\boldsymbol{l_i}+\quad -\boldsymbol{l_{sa}}-s)}{(j^{sa}+\boldsymbol{l_i}\quad -\boldsymbol{l_{sa}})!\,(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D\quad \boldsymbol{l_i})!}{(D+\quad -\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l}_{}-j_{sa}\right)!}$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j}\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \left(j_s=j_{ik}\right.$$

$$\sum_{j_{sa}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \left(j_{sa}=j_{ik}+j_{sa}-j_{sa}\right.$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \left(n_{is}=\right.$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_i-j_s)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{is}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{\boldsymbol{l_i}-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

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$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} +}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum^{(\ )} \sum$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum^{(n_i - j_s + 1)} \sum$$

$$\sum^{(n_{sa} = \quad + j_{ik} - j^{sa} \quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - \quad - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \quad - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \quad \boldsymbol{l} \wedge \boldsymbol{l_i} \quad D + s \quad \wedge$

$1 \leq \quad \leq j_{ik} - j_{sa}^{ik} + \quad j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \quad ^{ik} \leq j^{sa} \leq \quad + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - \quad + 1 = \boldsymbol{l_s} - \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \quad \boldsymbol{l} = \mathbb{k} >= 0 \wedge$

$\quad < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}\ \ -j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}\ \ +1)}^{(n_{ik}+j_{ik}-\ \ )} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}\ \ -j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i \ \ j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(\ \ - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1 \quad -j_s)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)\ (\boldsymbol{n}+j^{sa}- \quad j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s}\ \boldsymbol{l}-1)!}{-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D-}{(D+\ \boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j^{ik} \leq j_{ik} \leq \ +j_{sa}^{ik}-j \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i \ _{sa}-s \wedge j^{sa} \ -j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik} \ > \boldsymbol{l_{ik}} \wedge \boldsymbol{l} \ j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \ < n \wedge I = \ = 0 \wedge$

$j_s \leq j_{sa}^{i}-1 \ _{sa}^{ik}=j_{sa} \ 1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{ \ \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa} \cdots, j_{sa}^{i}\} \wedge$

$\geq 4 \wedge \ \leq s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k} \ _2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_{sa}+j_i-n_s-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D -}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa}$ $\boldsymbol{ik} \wedge \boldsymbol{l_i} +$ $- s > \boldsymbol{l_s} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} -$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad\boldsymbol{l}-1)}{(\boldsymbol{l_s}-\quad-\boldsymbol{l}+1)\quad-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\quad)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}\quad(j^{sa}+j_{s}\quad-j_{ik}-j_{sa})!}$$

$$\frac{(\boldsymbol{l_i}+\quad-\boldsymbol{l_{sa}}-s)}{(j^{sa}+\boldsymbol{l_i}\quad-\boldsymbol{l_{sa}})!\,(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D\quad\boldsymbol{l_i})!}{(D+\quad-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\;-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\quad)}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S}{}_{j_s,\ldots,j_{ik},j^{sa},j_i} \sum_{\ldots} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ldots)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\ldots+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\ldots-j_{sa}-s)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D+\boldsymbol{l_i})!}{(D+j_i+\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\sum_{j_i=\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-\boldsymbol{l}}^{(\quad)} \sum_{j^{sa}=j_i+j_{sa}-\boldsymbol{l_{ik}}+s}^{(\quad)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{(\quad)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(\quad)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_s}^{(\quad)} \sum_{n_{is}=n_{ik}+j_s-j_{ik}-\mathbb{k}_1}^{(\quad)}$$

$$\sum_{n_{sa}=n_{ik}+\mathbb{k}-j^{sa}-\mathbb{k}_2}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\quad)}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i + \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$\geq \boldsymbol{n} < \quad \wedge \boldsymbol{l} \neq \quad _i\boldsymbol{l} \wedge \quad \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j \leq j_{ik} - \quad \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \quad ^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\quad - j_{sa}^{ik} \quad = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(j_i+j_{sa}-s)} \sum_{\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-\boldsymbol{n}-\mathbb{k}_1}
$$

$$
\sum_{(\quad=\boldsymbol{n}-j^{sa}+1)}^{\quad+j_{ik}-j^{sa}} \sum_{\quad-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - \quad)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}^{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1 \quad -j_s)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2) \quad (\boldsymbol{n}+j^{sa} \quad j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l}_{\boldsymbol{j}} \quad \boldsymbol{l}-1)!}{j_s-\boldsymbol{l}+ \quad)! \cdot (j_s-2)!}$$

$$\frac{(D}{(D+ \quad -\boldsymbol{n}-\boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq \ _{sa}+j_{sa}^{ik}-j \ \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i \ _{sa}-s \wedge j^{sa} \ -j_{sa} \ \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik} \ _{sa}>\boldsymbol{l_{ik}} \wedge \boldsymbol{l} \ j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D+s \ \boldsymbol{n}<\boldsymbol{l_i} \leq \ +\boldsymbol{l_s}+s-\boldsymbol{n} \ \wedge$

$D \ \boldsymbol{n}<n \wedge \ =\mathbb{k}>= \ \wedge$

$j_{sa} \ j_{sa}^{i}-1 \wedge j_{sa}^{ik} \ j_{sa}-1 \ =j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \ j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \ldots \ _{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=\ \mathbb{k} \wedge$

$\mathbb{k}_2 \ =\ \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(\boldsymbol{n} + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\boldsymbol{l_{sa}}+\boldsymbol{l_{sa}}^{j^{sa}}-\boldsymbol{l_{ik}})!\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_s - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j_{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s)}^{(\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j_{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-_{ik}-j_{sa}\right)!}$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-_{sa}-s)!}\cdot$$

$$\frac{(\boldsymbol{l_i}-\boldsymbol{l_i})!}{\boldsymbol{n}-\boldsymbol{l_i}\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{=j_{sa}^{ik}+1}^{j_{sa}^{ik}-j_{sa}}\ \sum_{+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_i}-_{sa}-\boldsymbol{l})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-\quad)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\boldsymbol{=l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}}$$

$$\sum_{j_{ik}=\quad+1}^{\boldsymbol{l_s}+j_{sa}^{ik}}\ \sum_{(j^{sa}=\quad-j_{sa}-\boldsymbol{l}+1)}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\ \sum_{j_i=j^{\quad}+s-j_{sa}}$$

$$\sum_{\quad=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\quad-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{\quad_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D \ldots - j^{sa} \ldots - j_{sa}}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_i = \boldsymbol{n} + \ldots + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \ldots + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \ldots + j_{ik} - j^{sa} \ldots)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \ldots - \mathbb{k}_1 - \mathbb{k}_2) \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \ldots \boldsymbol{l} \wedge \boldsymbol{l_s} \ldots D - \boldsymbol{n} \ldots \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \ldots + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - \ldots + 1 = \boldsymbol{l_s} - \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} \ldots \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$\ldots \geq \boldsymbol{n} \ldots \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \quad \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \quad \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-\boldsymbol{l}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \quad \sum^{n_{is}+\quad -j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{+\mathbb{k}_2}^{\quad -j_{ik}+1}
$$

$$
(n_{ik}+\quad j^{sa}-\mathbb{k}_2)\ n_{sa}+\quad \quad j_i
$$

$$
\sum_{\quad -j^{sa}+\quad}^{\quad} \sum_{n_s=\boldsymbol{n}-j_i+1}^{\quad}
$$

$$
\frac{(n_i - n_{is}}{j_s - 2)!\,(n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{-n_{ik}-1)!}{(j_{ik} - j_s - 1)!\,(n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{sa} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i \quad -1)}{(j_s-2)\cdot(n_i-n_{is} \quad +1)!}\cdot$$

$$\frac{(n_{is}-n_{ik} \quad -1)!}{(j_{ik}-j_s \quad (n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)}{(j^{sa}-j_{ik} \quad -1)!\cdot(\quad +j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{a}{(j_i-j^{sa}-1)} \quad -n_s \quad 1)!}{(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{ \quad _{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-1)!\cdot(\ \ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\ \ -\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\ \ )!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}\ \ _{a}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge\ \ +s-j_{sa} \leq\ \ \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-\ \ > \boldsymbol{l_{ik}} \wedge\ \ j_{sa}-s>\ \ \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}\ \ -\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>=0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{s}\ \ =j_{sa}-1 \wedge j_{sa}^{s}\ \ j_{sa}^{ik}-1$

$\boldsymbol{s}\ \ \{j_{sa}^{s},\mathbb{k}_1,j_{s}\ \ \mathbb{k}_2,j_{sa},\ \ j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k}$

$\mathbb{k}_z: z=\ \ \wedge \mathbb{k}=\mathbb{k}_1+\ \ \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(\boldsymbol{l_{sa}} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j_{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s}^{\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s,\ldots,j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=2)}
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_{ik}}}\sum_{\boldsymbol{l}=(D-s+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}$$

$$\sum_{j_s=j_s+j_{sa}^{ik}-1}\sum_{(j^{sa}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}+1)}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{ik}-j_{sa}^{ik}+2)} \sum_{j_s=\boldsymbol{l_i}+\boldsymbol{n}-s+1}^{(} \sum_{j_{sa}=j_{ik}+j_{sa}-j_s}^{(} \sum_{j_i=j^{sa}+s-j_{sa}}^{(j_s+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(} \sum_{n_s=\boldsymbol{n}+\mathbb{k}-j_s}^{(} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(} \sum_{n_{sa}=n_{ik}}^{(} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i + \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j \leq j_{ik} - \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - {}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l} - j_{sa}^{ik} = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{=\boldsymbol{l_i}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-}^{n_{is}+j_s-\mathbb{k}_1}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+1}^{(n_{ik}+j_{ik}-j} \sum_{-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$(n_{ik}+j_{ik}$$

$$(n_{sa}=$$

$$\frac{(n_i - n_{i}$$

$$\frac{(n_{is}$$

$$\frac{(n_{ik}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=} {}_{+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1 \quad -j_s)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2) \quad (\boldsymbol{n}+j^{sa} \quad -j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l}-1)!}{-\boldsymbol{l}+)! \cdot (j_s-2)!}$$

$$\frac{(D}{(D+ -\boldsymbol{n}-\boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq \quad -1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_{ \quad }-j_{sa}^{ik}-1 \leq j_{ik} \quad j^{sa}+j_{sa} \quad j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa} \quad s \wedge j^{sa}+s \quad j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} \quad {}^{ik}+1=\boldsymbol{l_s} \quad {}_{a}+j_{sa}^{ik}-j_{sa} \quad {}_{k} \wedge \quad +j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D \quad s-\boldsymbol{n}< \quad \leq D+\boldsymbol{l} \quad s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} \quad =0 \wedge$

$j_{sa} \leq j_{sa} \quad 1 \wedge j_{sa}^{ik}=j_s \quad -1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik} \quad , j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge s \quad s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \quad \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{i}}{(j_{ik}-j_{s}}$$

$$\frac{(n_{ik}-n_{sa}-1)}{(j^{sa}-j_{ik}-1)!\cdot(}$$

$$\frac{(j_i-j^{sa}-1)}{(j_i-j^{sa}-1)}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ \ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-1)!\cdot(\ \ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\ \ -\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\ \ )!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq\ _{\boldsymbol{i}}\boldsymbol{l}-\ \ \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq\ \ \leq j^{sa}+j_{sa}^{ik}-\ \ j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+\ \ -j_{sa} \leq j_i \leq\ \ \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+\ \ -j_{sa} > \boldsymbol{l_{ik}}-\boldsymbol{l_i}+j_{sa}-\ \ \boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\ \ \boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\ \ >=0 \wedge$

$j_{\ \ } \leq j_{sa}^{i}-\ \ j_{sa}^{ik}=j_{s}-1 \wedge j_{sa}^{s}=j_{sa}^{i}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \ \ \cdots, j_{sa}^{i}\}$

$s \geq 4 \wedge\ \ =s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge\ \ =\mathbb{k}_1+\ \ \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_i-1)!\cdot(n_{sa}+j_i-j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_{sa}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l}_$$

$$(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\ (\boldsymbol{n}-j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{$ $\leq j^{sa}+j_{sa}^{i}$ j_{sa}

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s$ $^{sa}+s-j_{s}$ $\leq j_i \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>$ $\wedge \boldsymbol{l_i}+j_{sa}-s$ $\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1$ $j_{sa}^{s}=j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2$ $, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=$ $+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(\boldsymbol{l_{sa}} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik} + 2)} \sum_{(j_s = \boldsymbol{l_i} + \boldsymbol{n} - D - s + 1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\ } \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = {}^{ik}_{a} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=j_{sa}+1)}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_{s}-1)!}{(n_{s}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}-1)!\cdot(j_{ik}-j_s-\quad+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-\quad)!\cdot(j_i+\quad-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}\quad)}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{k=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\sum_{(j^{sa}=j_{sa}+1)}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}-j_{sa}}^{(\ )}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=s+1}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}^{(n_i-\boldsymbol{n}-1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\boldsymbol{n}\geq\boldsymbol{n}<\boldsymbol{n}\wedge\boldsymbol{l}\neq{}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_i=j^{sa}+}
$$

$$
\sum_{+\mathbb{k}} \sum_{+1}
$$

$$
\sum_{a=\boldsymbol{n}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\sum_{j_{ik}=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}\sum_{\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{ik}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{ik}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j_{sa}-\boldsymbol{n}-\mathbb{k}_1-\boldsymbol{l}_i-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\boldsymbol{l}_i)!\cdot(\boldsymbol{n}-j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \leq 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_i} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} \wedge \mathbb{k} = 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_s^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \ldots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_1 : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-}^{\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} - 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )} \sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} <$ $\wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_s} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-$ $\wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k} =$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,\,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\quad)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-\quad-\boldsymbol{l}+1)!\,(\quad-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}+1)!}{(j_s+\boldsymbol{l_{ik}}-\quad)!\cdot(j_{ik}-\quad-j_{sa}^{ik}+1)!}$$

$$\frac{(\boldsymbol{l_i}+\quad-\boldsymbol{l_{sa}}-\quad)!}{(j^{sa}+\boldsymbol{l_i}-\quad-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\quad-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\;-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\quad)}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

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$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$$

$$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{2\cdots,j_{ik},j^{sa},j_{\cdots}} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}-j_i} \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\right)}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(\boldsymbol{l}-\boldsymbol{l})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\quad-j_i)!}+$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-\boldsymbol{l}+1)}\ \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad-\boldsymbol{l}+1)}\ \sum_{(n_{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\ \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-\quad+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{j_{ik}=j^{sa}+\cdots}\sum_{(j^{sa}=j_i+\cdots-s)}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{(\quad)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}(\cdots=\boldsymbol{n}+\mathbb{k}-j_s}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\quad)}$$

$$\sum_{(n_{sa}=n_{ik}+\cdots-j^{sa}-\mathbb{k}_2)\ n_s=n_{sa}+j^{sa}-j_i}^{(\quad)}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i+\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\boldsymbol{n}\geq\boldsymbol{n}<\cdots\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\cdots\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_{ik}-\cdots\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-\cdots\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}\cdots>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

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$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{=\boldsymbol{l_i}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-}^{n_{is}+j_s-} \sum_{-\mathbb{k}_1}^{1}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-n_{sa})\ n_{sa}+j^{sa}-j_i} \sum_{-j_i+1}^{}
$$

$$
\frac{(n_{is} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_{is} - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$(n_{ik}+j_{ik}$$

$$(n_{sa}=\boldsymbol{n}$$

$$\frac{(n_i - n_{is}$$

$$\frac{(n_{is}$$

$$\frac{(n_{ik}$$

$$\frac{(n_{sa}-n_s-1)!}{(j^{sa}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)!\cdot(n_i-n_{is}}$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_{sa}-1)!\cdot(n_{is}+j_{sa}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{sa}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-1)!\cdot(\ \ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\ \ -\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\ \ )!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}\ \ _{a}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge\ \ +s-j_{sa} \leq\ \ \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{\ \ }=\boldsymbol{l_{ik}} \wedge\ \ j_{sa}-s>\ \ \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}\ \ -\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{s}\ \ =j_{sa}-1 \wedge j_{sa}^{s}\ \ j_{sa}^{ik}-1$

$\boldsymbol{s}\ \ \{j_{sa}^{s},\mathbb{k}_1,j_{s}\ \ \mathbb{k}_2,j_{sa},\ \ j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k}$

$\mathbb{k}_z: z=\ \ \wedge \mathbb{k}=\mathbb{k}_1+\ \ \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)}\ \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l} - j_{ik} - \boldsymbol{l} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(j_s - j_s - \boldsymbol{l} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j_{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_s})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+}^{j_{sa}^{ik}-\boldsymbol{l}}\sum_{j_{sa}^{ik}-D-s}^{(\ )}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

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$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s, \ldots, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{\boldsymbol{l_i}+\boldsymbol{n}-D-s} \sum_{(j_s=2)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ldots)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{\boldsymbol{l}=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s-1)}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j_{ik}+j_s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

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$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )}\sum_{(j^{sa}=j_{ik}+j_{sa}}\sum_{=j^{s}-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(\ +1)\ n_{ik}}^{(n_i-j_s+1}\sum_{+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}}^{(\ )}\sum_{+j_{ik}-j^{s}}\sum_{)\ n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-\ -\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\ -\mathbb{k}_1-\mathbb{k}\ )!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\ \ \boldsymbol{l}\wedge\boldsymbol{l_s}\ \ D-\boldsymbol{n}\ \ \wedge$

$D+\ \ +s-\boldsymbol{n}-\boldsymbol{l_i}\ \ \leq\boldsymbol{l}\leq\ \ \boldsymbol{l}-1\wedge$

$1\leq j_s\leq j_{\ }-j_{sa}^{ik}+1\wedge\ _s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+\ \ -j_{sa}^{ik}\leq j\ \ \leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\ \ >\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$+s-\ \ <\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{\boldsymbol{l_i}=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-n_{ik}-\mathbb{k}_1}
$$

$$
\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j_i=j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-\boldsymbol{l}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\mathbb{k}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j_{sa}-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}-j^{sa}+j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \geq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik} \leq 1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+j_{sa}-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_i} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}-\boldsymbol{l}=0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_s^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{i}, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_1: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=s+1}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s + 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_i-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=s+1}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D -}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} \geq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} +$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} -$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \quad + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\cdots)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\cdots-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-\cdots-\boldsymbol{l}+1)!\cdot(\cdots-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}+1)!}{(j_s+\boldsymbol{l_{ik}}-\cdots)!\cdot(j_{ik}-\cdots-j_{sa}^{ik}+1)!}$$

$$\frac{\cdots+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\cdots+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\cdots-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(}\cdot$$

$$\frac{(D-\boldsymbol{l})!}{(\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{}\sum_{}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}-}\sum_{(j^{sa}=j_{sa}+1)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _i\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{sa}^{ik}+1)} (j_s$$

$$\sum_{j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum^{(n_i-j_s} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}-j_{ik}+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j_{ik}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{}_{}) }^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j_{}-\mathbb{k}_1-\mathbb{k}_{}-j_{sa})!}{(n_i-\mathbb{k}_1-\mathbb{k}_{})!\cdot(\boldsymbol{n}^{}_{}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}_{}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq +s-\boldsymbol{n} \wedge$$

$$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq {}^{a}+j_{sa}^{ik}-j_{sa} \wedge$$

$$j_{ik}+{}_{sa}-j_{sa}^{ik} \leq j^{s}{}_{i}+j_{sa}-s \wedge {}_{i}+j_{sa}-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \wedge \boldsymbol{l_{sa}}+{}^{ik}-j_{sa} \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$$

$$D \geq < n \wedge I=\mathbb{k} \geq 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} 1 \wedge j_{sa}^{ik}=j_s 1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$$

$$\boldsymbol{s}\colon\{j_{}^{s}{}_{1},j_{sa}^{ik},\mathbb{k}_{2}\cdots,j_{sa}^{i}\} \wedge$$

$$s \geq 4 \wedge \boldsymbol{s} + \mathbb{k} \wedge$$

$$z=2 \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i \quad -1)}{(j_s-2)\cdot(n_i-n_{is} \quad +1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s)\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{sa}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-1)!\cdot(\ \ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\ \ -\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\ \ )!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}\ \ _{a}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge\ \ +s-j_{sa} \leq\ \ \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-\ \ > \boldsymbol{l_{ik}} \wedge\ \ j_{sa}-s=\ \ \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}\ \ -\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{s}\ \ =j_{sa}-1 \wedge j_{sa}^{s}\ \ j_{sa}^{ik}-1$

$\boldsymbol{s}\ \ \{j_{sa}^{s}, \mathbb{k}_1, j_{s}\ \ \mathbb{k}_2, j_{sa}, \ \ j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k}$

$\mathbb{k}_z : z\ \ \wedge \mathbb{k} = \mathbb{k}_1+\ \ \Rightarrow$

$$_{fz}S_{j_s,\ j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)}\ \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ \ )}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l} - j_{ik} - \boldsymbol{l}_{\boldsymbol{s}})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_s - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\ )} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_s} + s - \boldsymbol{l}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s,\ldots,j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_{ik}=\boldsymbol{l}+\boldsymbol{n}-D}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{j_i=j^{sa}+s-j_{sa}} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!} \cdot \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-}$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(}\cdot$$

$$\frac{(D-}{+}+$$

$$\sum_{k=\boldsymbol{l}}^{}\sum_{(j_s=2)}^{}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+}\sum_{=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} +}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} - D - s)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{\boldsymbol{n}}^{n} \sum_{+\mathbb{k}\ (n_{is} = \boldsymbol{n} + j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \boldsymbol{n} \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \quad \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s} \quad \sum_{j_i=j^{sa}+s}^{}
$$

$$
\sum_{}^{n} \quad \sum_{}^{(n_i-j_s+1)} \quad \sum_{}^{i_k+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{}^{+\mathbb{k}\ (n_{is}-\mathbb{k}-j_s+1)\ n_{ik}} \quad \sum_{}^{j_{ik}+1}
$$

$$
\sum_{}^{(n_{ik}+} \quad \sum_{}^{j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i}
$$

$$
\sum_{a=\boldsymbol{n}-j^{sa}+1)}^{} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is} - 1)!}{\quad - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{ik - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)}\ \sum_{j_i}^{sa}+s-j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{n_{is}+j_s-ik-\mathbb{k}_1}+1$$

$$\sum^{(n_{ik}+j_{ik}-\mathbb{k}_2)}\ \sum_{sa}^{n_{sa}+j^{sa}-j}$$

$$\sum_{sa=\boldsymbol{n}-j}\ \sum_{\boldsymbol{n}-j_i+1}$$

$$\frac{(-n_{is}-1)!}{()-2)!\cdot(-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{ik}-n_{ik}-1)!}{()-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-j}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$(n_{ik}+j_{ik}$$

$$(n_{sa}=$$

$$\frac{(n_i - n_{i}$$

$$(j_s$$

$$\frac{(n_{is}$$

$$(j_{ik}-j_s$$

$$\frac{(n_{ik}$$

$$(j^{sa}$$

$$\frac{(n_{sa}-n_s-1)!}{(j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_s)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(j_{ik}-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D-\boldsymbol{n}-1)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j^{ik}_{sa} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+j_{sa}-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-1 > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge \mathbb{k} >= \mathbb{k} \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j_{sa}=j_{sa}^{ik}-1 \wedge$

$\cdots\{j_{sa}^{s}, \mathbb{k}_{\cdots}, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s \cdots \mathbb{k} \wedge$

$\mathbb{k}_2 \geq \cdots \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fz S_{j_s,\,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{\left(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s\right)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_i-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)!}{(j_s + j_{sa}^{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\cdots)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\cdots-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-\cdots-\boldsymbol{l}+1)!\cdot(\cdots-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}+1)!}{(j_s+\boldsymbol{l_{ik}}-\cdots)!\cdot(j_{ik}-\cdots-j_{sa}^{ik}+1)!}$$

$$\frac{\cdots+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\cdots+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\cdots-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ \ )}\ \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{}\sum$$

$$\sum_{j_{ik}=}^{(}\sum_{j_i=}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{\boldsymbol{l_i}=\boldsymbol{n}+\mathbb{k}}^{m}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s, j_{ik}, j^{sa}, \ldots} = \sum_{\boldsymbol{=l}} \sum_{(j_s=2)} \ldots$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}} \sum_{D\ (j^{sa}=\ldots \boldsymbol{n}-D)\ j_i=j^{sa}+s-j_{sa}} \ldots$$

$$\sum_{\ldots -j_s+1)} \sum_{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \ldots$$

$$\sum_{n}^{} \sum_{\ldots \mathbb{k}\ (n_{is}=\ldots -j_s+1)\ n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1} \ldots$$

$$(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i \ldots$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i+1} \ldots$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_{ik}}}\sum_{j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{j_{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_s}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{ik}-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D} \quad - j_{sa}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum^{(n_i - j_s + 1)} \sum_{n_{ik} = \quad - j_{ik} - \mathbb{k}_1}$$

$$\sum^{(} \sum_{(n_{sa} = \quad - j_{ik} - j^{sa} - \quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_{\quad} - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \quad - \mathbb{k}_1 - \mathbb{k}_{\quad} \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \quad \boldsymbol{l} \wedge \boldsymbol{l_s} \leq \quad - \boldsymbol{n} \quad 1 \wedge$

$1 \leq j_{\quad} \leq j_{ik} - j_{sa}^{ik} + 1 \quad j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \quad \leq j^{sa} \leq \quad + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} \quad + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} \quad \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$\quad \quad \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1} \quad \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \quad \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \quad \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \quad \sum_{n_{is}+\mathbb{k}}^{n_{is}-j_{ik}-\mathbb{k}_1}
$$

$$
(n_{ik}+ \quad (j^{sa}-\mathbb{k}_2)\ n_{sa}+ \quad j_i
$$

$$
\sum_{\boldsymbol{n}-j^{sa}+}^{} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is}}{(j_s-2)\ (n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{{}_s - n_{ik} - 1)!}{(j_{ik}-j_s-1)\ (n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n - n_{sa}-1)!}{{}^{a}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{{}_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_i-1)!\cdot(n_{sa}+j_i-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s-\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l}$$

$$(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa}$ $\boldsymbol{ik} \wedge \boldsymbol{l_i} + j$ $- s = \boldsymbol{l}$ $\wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n}$ $1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} -$ $\wedge j_{sa}^{s} = j_{sa}$ $1 \wedge$

$\boldsymbol{s}$: $\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{l}$

$s \geq 4 \wedge \boldsymbol{s} = s +$ $\wedge$

$\mathbb{k}_-: z = 2 \wedge$ $= \mathbb{k}_1 +$ $\Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{-1)!}{(n_s +$$

$$\frac{(\boldsymbol{l}-1)!}{(j_s - \boldsymbol{l}$$

$$\frac{(\boldsymbol{l_{ik}}$$

$$\frac{(\boldsymbol{l_{sa}} + j_s$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}-1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}-$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}\sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}}\sum_{s}+j_{sa}^{ik}-1\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

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$$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq {}_{i}\boldsymbol{l} - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{j_s, j_{ik}, \ldots, j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{j_{ik}=\boldsymbol{l_{ik}}-D}^{(\quad)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}-j_i} \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} +} \sum_{j_{ik} = j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = j_i + j_{sa} - s)} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_s} + s - \boldsymbol{l}}$$

$$\sum_{\mathbb{k}=0}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k}} \sum_{j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \ldots \boldsymbol{n} \ldots \wedge \boldsymbol{l} \neq \ldots \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s \ldots \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq \ldots \boldsymbol{l} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{j_s=2)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \quad \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}}^{(\quad -\boldsymbol{l}+1)} \quad \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \quad \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{\quad -1)\ n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1} \quad \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{\quad -j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{a=\boldsymbol{n}-j^{sa}+1)}^{\quad +j_{ik}-j\ -\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_{i}^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s} -\mathbb{k}_1$$

$$\sum_{(n_{sa}=n_i}^{(\ )} \sum_{j_{ik}-j} \sum_{+j^{sa}-j_i}$$

$$\frac{(n_i \quad ^{sa}-j_i \quad \mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1 \quad \mathbb{k}_2)!\cdot(\quad +j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s} \quad j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \quad \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n} \quad 1 \wedge$

$D+\boldsymbol{l_s}+s \quad -\boldsymbol{l_i}+ \quad \leq \boldsymbol{l} \leq \quad _i\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik} \quad 1 \wedge j_s+ \quad ^{ik} \quad \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa} \quad -j_{sa}^{ik} \leq j^{sa} \leq \quad +j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 \quad \boldsymbol{l_s} \wedge \boldsymbol{l_{ik}} \quad -j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \quad _{sa} \quad \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \quad I = \mathbb{k} >= 0 \wedge$

$j_{sa} \quad _{sa}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2}
$$

$$
\sum_{(n_{sa}=j_{ik}+j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i-n_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_s}+s-\boldsymbol{l}} j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}^{} {}_{+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1 \quad -j_s)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2) \quad (\boldsymbol{n}+j^{sa} \quad j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l}-1)!}{\quad -\boldsymbol{l}+1)! \cdot (j_s-2)!}$$

$$\frac{(D}{(D+ \quad -\boldsymbol{n}-\boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n}$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+$ $j_{ik} \leq j$ $+j_{sa}^{ik}-j$ $\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i$ $_a-s \wedge j^{sa}$ $-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-$ $> \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}$ $j_{sa}-s > \boldsymbol{l_{sa}}) \vee$

$(D \geq$ $< n \wedge \boldsymbol{l} \neq$ $\wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+$ $\wedge$

$1 \leq j_s \leq j_{ik}-$ $+1 \wedge j_s+$ $j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

j_{ik} $_a-j_{sa}^{ik} \leq j^{sa}$ j_i+j_{sa} $s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$-s+$ $\boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq$ $+s-\boldsymbol{n}$

$D \geq \boldsymbol{n} <$ $l = \mathbb{k} >= 0 \wedge$

$< j^i$ $1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=s}^{\boldsymbol{l_s}+s-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}} \sum_{n_{ik}=\boldsymbol{n}-j_{ik}+1}^{}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}}^{(n_{ik}+j_{ik}-} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j_{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - \quad j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} \quad _{ik} - 1)!}{(j_{ik} - j_s \quad 1)! \cdot (n_{is} \quad j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} \quad n_{sa} - 1)!}{(j^{sa} \quad _{ik} - 1)! \quad n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{\quad - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$(n_{ik}+j_{ik}-\mathbb{k}_2)\, n_{sa}^{\,j^{sa}-j_i}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-\boldsymbol{n}}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \sum_{n_s=n_{sa}+j^{s}}$$

$$\frac{(n_i+j \quad \mathbb{k}_1-j_{sa})!}{(n_i-n-\mathbb{k}_1 \quad)!\cdot(n \quad j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s \quad +1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D \quad j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _i\boldsymbol{l} \wedge \boldsymbol{l}_i \quad D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik} \quad 1 \leq j_{ik} \leq \quad a+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}- \quad ^{ik} \leq j^{sa} \quad j_i+j_{sa}-s \wedge j \quad s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1> \quad \wedge \boldsymbol{l_{sa}}+ \quad -j_{sa} \quad \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}) \vee$

$(D \geq \quad < n \wedge \boldsymbol{l} \neq \ _i \quad \boldsymbol{l_s} \leq D- \boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \quad j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+ \quad -j_{sa}^{ik} \leq j^{sa} \quad j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i}-s+1 \quad \boldsymbol{l_s} \wedge$

$\quad D \quad -\boldsymbol{n})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

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$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=}^{\boldsymbol{l_i}-\boldsymbol{l}+1} {}^{a}{}_{+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-}^{n_{is}+j_s-\ \ -\mathbb{k}_1}
$$

$$
\sum_{(\ \ =\boldsymbol{n}-j^{sa}+1)}^{\ \ +j_{ik}-j^{s}\ \ )} \sum_{\ \ -j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_{i} - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{} - n_{ik} - 1)!}{(j_{ik} - \ \ \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{s} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\sum_{j_{ik}=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}\sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_s-n_{is}-1)!}{(j_s-2)!\cdot(n_s-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{is}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{ik}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-}^{} -j_{ik}-\mathbb{k}_1$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \sum_{k_2)} \sum_{n_s=n_{sa}+j^{sa}}^{}$$

$$\frac{(n_i + j \quad \mathbb{k}_1 - \quad - j_{sa})!}{(\quad - n - \mathbb{k}_1 - \quad)! \cdot (\quad - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s \quad + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D \quad j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l}_{\boldsymbol{i}} \quad D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \quad 1 \leq j_{ik} \leq \quad a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \quad ^{ik} \leq j^{sa} \quad j_i + j_{sa} - s \wedge j \quad s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \quad \wedge \boldsymbol{l_{sa}} + \quad - j_{sa} \quad \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \quad < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}} \quad \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \quad j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + \quad - j_{sa}^{ik} \leq j^{sa} \quad \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i} - s + 1 \quad \boldsymbol{l_s} \wedge$

$\quad D \quad - \boldsymbol{n})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

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$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-\boldsymbol{n}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}} \sum_{j_i=}^{n_{sa}+j^{sa}-j_i}
$$

$$
\sum_{(\quad=\boldsymbol{n}-j^{sa}+1)}^{\quad} \sum_{\quad}^{\boldsymbol{l}-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - \quad)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

GÜLDÜNYA

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum^{(n_i-j_s+1)}\ \sum^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum^{(n_{ik}+j_{ik}-\mathbb{k}_2)}\ \sum^{n_{sa}+j^{sa}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}}\ \sum^{\boldsymbol{n}-j_i+1}$$

$$\frac{-n_{is}-1)!}{(-2)!\cdot(-n_{is}-j_s+1)!}\cdot$$

$$\frac{(-n_{ik}-1)!}{(-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(-n_{sa}-1)!}{(-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+ -j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}+)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j \quad \mathbb{k}_1-\mathbb{k} \quad -j_{sa})!}{(n_i- \quad -\mathbb{k}_1- \quad)!\cdot(\boldsymbol{n} \quad -j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{ -j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D \quad j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _i\boldsymbol{l} \wedge \boldsymbol{l_i} \ D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq \ ^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}- \ ^{ik} \leq j^{sa} \ _i+j_{sa}-s \wedge j \ s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1> \ \wedge \boldsymbol{l_{sa}}+j \ -j_s \ \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}) \vee$

$(D \geq \ \leq n \wedge \boldsymbol{l} \neq \ _i\boldsymbol{l} \ \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik} \ j_{sa}^{ik}+1 \ _s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik} \ _s-j_{sa}^{ik} \leq j \ \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i}-s+1 \ \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \ s-\boldsymbol{n})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

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$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-}^{n_{is}+j_s-\mathbb{k}_1}
$$

$$
\sum_{}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{}^{n_{sa}+j^{sa}-j_i}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+1}^{} \sum_{}^{-j_i+1}
$$

$$
\frac{(n - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )}\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s}\sum_{-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_i}^{(\ )}\sum_{-j_{ik}-j}\sum_{+j^{sa}-j_i}$$

$$\frac{(n_i-j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-+1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}-1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}-j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$$

$$D+s-\boldsymbol{n}<-D+\boldsymbol{l_s}+s-\boldsymbol{n}-1)\vee$$

$$(D\geq\boldsymbol{n}\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$$

$$\boldsymbol{l_i}-s+1>\boldsymbol{l_s}\wedge$$

$$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1)\big)\wedge$$

$$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}+j_{sa}^{ik}+\boldsymbol{n}-D)}^{(j_i+\boldsymbol{l_{ik}}-s)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{j_{ik}+s-\boldsymbol{l}}
$$

$$
\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}-\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i=\boldsymbol{l_s}}^{-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n}\ \sum_{\mathbb{k}-j_s+1)}^{(n_i-j_s}\ \sum_{\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=}^{+j_{ik}-j}\ \sum_{sa}+1)}^{j^{sa}-j_i}\ \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-\ \ !\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

GÜLDÜNYA

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s}^{\boldsymbol{l_s}+s-} \sum_{=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s}^{} \sum_{-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_i}^{(\ )} \sum_{-j_{ik}-j^{sa}}^{} \sum_{+j^{sa}-j_i}$$

$$\frac{(n_i - {}^{sa} - j_i - {}_2 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 \ \mathbb{k}_2)!\cdot(\ j^{sa} - j_i - j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s} \ j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \ {}_i\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \ + 1 \wedge$

$1 \ j_s \leq j_{ik} \ {}^{ik}_{sa} + 1 \wedge \ + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} \ j_{sa} - j_{sa}^{ik} \leq j \ \leq j_i + j_{s} \ \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} \ 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} \ j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \ < D \ _s + s - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} \ \wedge \boldsymbol{l} \neq \ {}_i\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq \ - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i} - s + 1 > \boldsymbol{l_s} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}\ (\boldsymbol{l_i}+\boldsymbol{n}+j_s} \sum_{(j^{sa}=}^{-s-1)} \sum_{j_i=\boldsymbol{l_i}+}^{\boldsymbol{l}+1}
$$

$$
\sum_{}^{n} \sum_{+\mathbb{k}\ (n_{is}=}^{(n_i-j_s+1)} \sum_{}^{+j_s-j_{ik}-\mathbb{k}_1} \sum_{}^{j_{ik}+1}
$$

$$
\sum_{a=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+} \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{\quad - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{ik - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j^{sa}=\boldsymbol{l}-j_{sa}}^{\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_i-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_{i}=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{is}-1)!}{(j_i-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_s-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{ik}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-}$$

$$\frac{(n_i + j_{sa} - \mathbb{k}_1 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 -)! \cdot (n_{sa} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D - j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} < D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} \leq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \quad \sum_{(j^{sa}=\boldsymbol{l_{sa}}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \quad \sum_{j_i=\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \quad \sum_{(\mathbb{k}_1-j_s+1)}^{(n_i-j_s)} \quad \sum_{n_i+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+j_{ik}-j^{sa}+1)}^{} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s -)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i}^{\boldsymbol{l_i}-\boldsymbol{l}+1}{}_{sa}+s-j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}{}_{+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{n_{is}+j_s}{}_{ik}-\mathbb{k}_1{}_{+1}$$

$$\sum_{}^{(n_{ik}+j_{ik}-}{}_{\mathbb{k}_2)}\ \sum_{n_{sa}=\boldsymbol{n}-}^{n_{sa}+j^{sa}-j}{}_{a}-j_i+1$$

$$\frac{(\quad-n_{is}-1)!}{(\quad-2)!\cdot(\quad-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{\quad}-n_{ik}-1)!}{(\quad-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{\quad}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+}^{(n_{ik}+j_{ik}-}\ \sum_{}^{n_{sa}+j^{sa}-}$$

$$\sum_{}^{\boldsymbol{n}-j_i+1}$$

$$\frac{-n_{is}-1)!}{-2)!\cdot(-n_{is}-j_s+1)!}\cdot$$

$$\frac{(-n_{ik}-1)!}{(-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(-n_{sa}-1)!}{(-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa})}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j_{sa}-\mathbb{k}_1-\mathbb{k}_1-j_{sa})!}{(n_i-\mathbb{k}_1-\mathbb{k}_1)!\cdot(\boldsymbol{n}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \ D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq \ ^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-\ ^{ik} \leq j^{sa} \ _i+j_{sa}-s \wedge \ s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \ \wedge \boldsymbol{l_{sa}}+j_{sa}-j_s \ \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D+\ \boldsymbol{n} < \boldsymbol{l_i} \leq D \ +s-\boldsymbol{n}-1) \vee$

$(D \geq \boldsymbol{n} < \ \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \ \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq \ j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-\ \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\ > \boldsymbol{l_s} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\ \ -D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=\ \ +\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\ \ }^{n} \sum_{\ \ +\mathbb{k}-j_s+1)}^{(n_i-\ \ )} \sum_{\ \ =\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s\ \ \mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\ \ +1)}^{\ \ +j_{ik}-\ \ +j^{sa}-j_i} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \ \ )! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(\ \ _{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(\ \ - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+}^{(n_{ik}+j_{ik}-}\ \sum_{}^{n_{sa}+j^{sa}-}$$

$$\sum_{}^{\boldsymbol{n}-j_i+1}$$

$$\frac{-n_{is}-1)!}{(-2)!\cdot(-n_{is}-j_s+1)!}\cdot$$

$$\frac{(-n_{ik}-1)!}{(-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(-n_{sa}-1)!}{(-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_{sa}}$$

$$\frac{(n_i+j_{ik}-j_{ik}-\mathbb{k}_1-j_{sa}-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(j_{ik}-j^{sa}+j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i}-s+1 > \boldsymbol{l_s} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1)\Big) \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{j_s=2)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{1}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{}
$$

$$
\sum_{a=\boldsymbol{n}-j^{sa}+1)}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )}\sum_{(j^{sa}=j_{ik}+j_{sa}}\sum_{j^{sa}-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(\ +1)\ n_{ik}}^{(n_i-j_s+1}\sum_{+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}}^{(\ )}\sum_{+j_{ik}-j^{s}}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_{}-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\ -\mathbb{k}_1-\mathbb{k}_{})!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}_{\ }{}_i\boldsymbol{l}\wedge\boldsymbol{l_i}\ D+s-\ \wedge$

$1\leq\ \leq j_{ik}-j_{sa}^{ik}+\ \wedge j_s+j_{sa}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-\ ^{ik}\leq j^{sa}\leq\ +j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-\ ^{ik}+1=\ \boldsymbol{sa}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<\ \ =\mathbb{k}>=0\wedge$

$<j^i\ \ 1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\ {}_i\boldsymbol{l}}^{(\ )} \sum_{(j_s=1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=} \qquad \boldsymbol{l_i} - {}_i\boldsymbol{l}+1
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}} \qquad (n_i - j_{ik} - \mathbb{k}_1 + 1)
$$

$$
n_{ik}+j_{ik}-j \qquad (n_{sa}+ \qquad -j_i)
$$

$$
\sum_{n_{sa}=\boldsymbol{n}-} \qquad +1 \quad \sum_{(n_s=\boldsymbol{n}-j_i+} \qquad
$$

$$
\frac{\qquad - n_{ik} \qquad 1)!}{(j_{ik} - \qquad)! \cdot (n_i \qquad _{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - \qquad - 1)!}{(j^{sa} - j_{ik} - \qquad \cdot (n_{ik} + \qquad - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n \qquad - n_s - 1)!}{(j \qquad j^{sa} - 1) \qquad (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(\boldsymbol{l_i} + j_{sa} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\ {}_i\boldsymbol{l}}^{(\ )} \sum_{(j_s=1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}
$$

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$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-$$

$D \geq \boldsymbol{n} <\wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n}$

$\boldsymbol{l_i}-s+1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}$ $1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\ _{\boldsymbol{i}}\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} -} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_s} - s)!}{(\boldsymbol{l_i} + j_{sa} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i - s)!}$$

$$\frac{(\quad \boldsymbol{l_i})!}{(D + j_{\quad} - \boldsymbol{n} - \boldsymbol{l_i})! \cdot \quad j_i)!} -$$

$$\sum_{\boldsymbol{l}} \sum_{(j_s=1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\quad)} \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\quad)}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\quad)}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \quad n \wedge \boldsymbol{l} = \quad \boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_i \quad j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} \quad j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\ _i\boldsymbol{l}}^{(\ )} \sum_{(j_s=}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}
$$

$$
\sum_{\boldsymbol{n}+\mathbb{k}} \sum_{(n_s=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}
$$

$$
\sum_{n_{sa}=\boldsymbol{n}-} \sum_{(n_s=\boldsymbol{n}-j_i+1)}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 1)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot (j^{sa} - j_{sa})!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\ _i\boldsymbol{l}}^{(\ )} \sum_{(j_s=1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}}{(D+s-\boldsymbol{l_i})!(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+$ $\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-$ $\leq j_i-$ $\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-$ $=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge$ $-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{$ $\wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z$ $2 \wedge \mathbb{k} = \mathbb{k}_1$ $\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\left(\boldsymbol{l_{sa}}-\ _{\boldsymbol{i}}\boldsymbol{l}+1\right)} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_s+j^{sa}-j_i)}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s -$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)!}$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik}\right.$$

$$\frac{(D$$

$$\sum_{k=}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$$> \boldsymbol{n} \wedge \boldsymbol{l} = \boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\ldots} \sum_{(j_s=1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j\ldots} \sum_{(j^{sa}=j_i\ldots-s)}^{(\ )} \sum_{j_i=s}^{\ldots+1}
$$

$$
\sum_{n_i=\ldots}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{\ldots\mathbb{k}_1+1)}
$$

$$
\sum_{\ldots sa=\boldsymbol{n}-j^{sa}+1}^{\ldots+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\ {}_i\boldsymbol{l}} \sum_{(j_s=1)}^{(\ )}
$$

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$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )}\sum_{(j^{sa}=j_{sa})}\sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_s-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}-j_{sa} \leq j_i \leq \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \wedge \boldsymbol{l_i}+ -s = \boldsymbol{a} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_s = j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}-\mathbb{k}_1, j_{sa}^{ik}-\mathbb{k}_2, j_{sa}\ldots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\ldots \wedge$

$\mathbb{k}_z: z\ldots 2 \wedge \mathbb{k} = \mathbb{k}_1+\ldots_2 \Rightarrow$

$$fz S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\ {}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ )}\sum_{(j_s=1)}^{\left(\boldsymbol{l_{sa}}-\ {}_{\boldsymbol{i}}\boldsymbol{l}+1\right)}\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{sa})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

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$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - \quad)!}{(n_s + j_i \quad \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} \quad)!} \cdot$$

$$\frac{(\boldsymbol{l}_{\boldsymbol{s}} - \boldsymbol{l}_{\boldsymbol{s}} - \quad + 1)!}{(\boldsymbol{l}_{\boldsymbol{ik}} \quad - \boldsymbol{l}_{\boldsymbol{s}} \quad)! \quad - j_{sa}^{ik})!} \cdot$$

$$\frac{(D - \boldsymbol{l}_{\boldsymbol{i}})!}{(\quad + j_i - \boldsymbol{n} \quad \boldsymbol{l}_{\boldsymbol{i}})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l}_{\boldsymbol{i}})!}{(D + s - \boldsymbol{n} - \boldsymbol{l}_{\boldsymbol{i}})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l}_{\boldsymbol{i}} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik}\ \ j_i} = \sum_{k=\ _i\boldsymbol{l}}^{(\ )} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}}^{\boldsymbol{l_{ik}}-\ _i\boldsymbol{l}+1} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\ {}_{i}\boldsymbol{l}} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{ik}=n_i-\ -\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{s}} \sum_{(n_s=n_{sa}+j^{sa}}^{(\ )}$$

$$\frac{(n_i+j \quad \mathbb{k}_1-\mathbb{k} \quad -j_{sa})!}{(\ i-\boldsymbol{n}-\mathbb{k}_1-\ )!\cdot(\boldsymbol{n} \quad {}^{sa} \quad i-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s \quad \boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s \quad {}_{sa}^{ik}-1 \leq \quad \leq j^{sa} \quad {}^{ik} \quad {}_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j \quad -s \wedge j^{sa}+ \quad -j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 = \boldsymbol{l} \quad \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \quad \boldsymbol{l_{ik}} \wedge \boldsymbol{l} \quad -j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \quad \boldsymbol{l} = \mathbb{k} > \quad 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_s \quad = j_{sa}- \quad \wedge j_s^{s} \quad j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s} \quad , j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \quad , j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = \quad + \mathbb{k} \wedge$

$\mathbb{k}_z: \quad \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\ {}_{i}\boldsymbol{l}} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\boldsymbol{l_{sa}}-\ {}_{i}\boldsymbol{l}+1)} \sum_{j_i=s}^{\boldsymbol{l_i}-\ {}_{i}\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\ \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+\quad-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-\quad-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n-\quad)!}{(n_s+j_i-\boldsymbol{n}-\quad-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_i-\boldsymbol{l_{sa}}-s)!}{(\quad+\boldsymbol{l_i}-\quad)!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\quad\boldsymbol{l}}\ \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}\ \sum_{(j^{sa}=j_{sa})}^{(\ )}\ \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\ \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j_{\dots, j_{ik}, j^{sa}, j_i} = \sum_{k={}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa})}^{\left(\boldsymbol{l_{sa}}-{}_{\boldsymbol{i}}\boldsymbol{l}+1\right)} \sum_{j_i=s}^{\boldsymbol{l_i}-{}_{\boldsymbol{i}}\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{\left(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}+1\right)!\cdot\left(j_{ik}-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s\right)!}{\left(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}}\right)!\cdot\left(j_i+j_{sa}-j^{sa}-s\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\prod_{k=1}^{(\ )}\sum_{(j_s=1)}$$

$$\prod_{j_{ik}=j_{sa}}^{(\ )}\sum_{(j^{sa}=j_{sa})}\sum_{j_i=s}$$

$$\prod_{n_i=\boldsymbol{n}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\prod_{a=n_{ik}+}^{(\ )}\sum_{-j^{sa}-\mathbb{k}_2\ (n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\boldsymbol{l}\wedge\boldsymbol{l_i}\leq+s\wedge$

$1\leq j_s<j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_s+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

$j_s<j_{ik}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\ {}_i\boldsymbol{l}} \sum_{(j_s=1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_{ik}}-\ {}_i\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-}^{\boldsymbol{l_i}-\ {}_i\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} -j_{ik}+1)
$$

$$
\sum_{n_{sa}=\boldsymbol{n}-}^{n_{ik}+j_{ik}-j} +1 \sum_{(n_s=\boldsymbol{n}-j_i+}^{(n_{sa}+} {}^{sa}-j_i)
$$

$$
\frac{\ - n_{ik}\ 1)!}{(j_{ik}\ )! \cdot (n_i\ \ {}_k+1)!} \cdot
$$

$$
\frac{(n_{ik}-\ -1)!}{(j^{sa}-j_{ik}-\ )! \cdot (n_{ik}+\ -n_{sa}-j^{sa})!} \cdot
$$

$$
\frac{(n\ -n_s-1)!}{(j_i\ j^{sa}-1)!\ (n_{sa}+j^{sa}-n_s-j_i)!} \cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j_i)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}+1)! \cdot \left(j_{ik}-j_{sa}^{ik}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})! \cdot (j_i+j_{sa}-j^{sa}-s)!} \cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!} -
$$

$$
\sum_{k=\ {}_i\boldsymbol{l}} \sum_{(j_s=1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\ \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}}{(D+s-\boldsymbol{l_i})!(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+$ $\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-$ $\leq j_i-$ $\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-$ $= \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge$ $-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{s}$ $\wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z$ $2 \wedge \mathbb{k} = \mathbb{k}_1$ $\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,\,j_{ik},j^{sa},j_i} = \sum_{k=\ {}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ )}\ \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_{ik}}-\ {}_{\boldsymbol{i}}\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\ \sum_{j_i=s}^{\boldsymbol{l_i}-\ {}_{\boldsymbol{i}}\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\ \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - \quad)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - j_s^{ik} + 1\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s} + 1)! \cdot (j_{sa}^{ik})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - \quad\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \quad)! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \quad - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\ _i\boldsymbol{l}} \sum_{(j_s=1)}^{(\ \ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ \ )} \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ \ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ \ )}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _i\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_t} \sum_{k=i}^{(\ )} \sum_{(=1)}$$

$$\sum_{\boldsymbol{l_{ik}} - \ _i\boldsymbol{l}+} \sum_{\left(\boldsymbol{l_{sa}} - \ _i\boldsymbol{l}+1\right)}$$

$$\sum_{j_{sa}^{ik}} \left(j^{sa} \quad + j_{sa} - j_{sa}^{ik}\right) \quad \sum_{s-j_{sa}}$$

$$\sum_{(n_i - j_{ik} - \mathbb{k}_1 + 1)}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}$$

$$j_{ik} - j^{sa} - \mathbb{k}_2 \ (n_{sa} + j^{sa} - j_i)$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1} \sum_{(n_s=\boldsymbol{n}-j_i+1)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\ {}_{i}\boldsymbol{l}}^{(\ )}\sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )}\sum_{(j^{sa}=j_{sa})}\sum_{j_i}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-\ -\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{s}}\sum_{(n_s=n_{sa}+j^{sa}}^{(\ )}$$

$$\frac{(n_i+j_{\ }-\mathbb{k}_1-j_{sa})!}{(n_i-n_{\ }-\mathbb{k}_1-\ )!\cdot(n_{\ }-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_{s}\ {}_{sa}^{ik}-1 \leq\ \leq j^{sa}\ {}_{ik}\ {}_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{\ }-s \wedge j^{sa}+\ -j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \ \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}\ \leq \boldsymbol{l_{ik}} \wedge \boldsymbol{l}\ -j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{s}\ = j_{sa}-\ \wedge j_{s}^{s}\ {}_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}\ , j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \ , j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = \ +\mathbb{k} \wedge$

$\mathbb{k}_z\ \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\ {}_{i}\boldsymbol{l}}^{(\ )}\sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_{ik}}-\ {}_{i}\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{sa})}^{\left(\boldsymbol{l_{sa}}-\ {}_{i}\boldsymbol{l}+1\right)}\ \sum_{j_i=s}^{\boldsymbol{l_i}-\ {}_{i}\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n-1)!}{(n_s+j_i-\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1\right)!}{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}+1)!\cdot\left(j_{ik}-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}-j_{sa}-j^{sa}+1)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\ \boldsymbol{i}\boldsymbol{l}} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

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$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{j_s, j_{ik}, j_{sa}^{ik}, j_{sa}, j_{sa}^{s}, j_{sa}^{i}} = \sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}} \sum_{} \sum_{(j_i + j_{sa}} \sum_{\boldsymbol{l_{sa}} + j_{sa} - \boldsymbol{l} - s + 1}$$

$$\sum_{j_i = s+1}^{n} \sum_{(n_i - j_s + 1)} \sum_{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}$$

$$\sum_{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_{sa} + j^{sa} - j_i}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)} \sum_{n_s = \boldsymbol{n} - j_i + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - \quad +$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-} \sum_{(j^{sa}=j_{sa}+1)} \sum_{\boldsymbol{l_{sa}}+j_{sa}-\boldsymbol{l}-s+2}$$

$$\sum_{n_i=\boldsymbol{n}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}$$

$$\sum_{a=\boldsymbol{n}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(\quad - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_{sa}}+j_{sa}-\boldsymbol{l}-s+1} \sum_{j_i=s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\cdots-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j\ \ \mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j\ \ \mathbb{k}_1-\ \ -j_{sa})!}{(\ \ -n_{\cdot}-\mathbb{k}_1-\ \ )!\cdot(n\ \ {}^{sa}\ \ -j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s\ \ +1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D\ \ j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \ \ 0 + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq \ \ a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + \ \ - j_{sa}^{ik} \leq j^{\ \ } < j_i + j_{sa} - s \wedge \ \ a \ \ - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \ \ \wedge \boldsymbol{l_{sa}} \ \ ik - j_{sa} \ \ \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \ \ < n \wedge I = \mathbb{k} \ \ 0 \wedge$

$\ \ sa \leq j_{sa}^{i} \ \ 1 \wedge j_{sa}^{ik} = j_s \ \ - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_s^s \cdots, \mathbb{k}_1, j_{sa} \ \ sa, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} \ \ s + \mathbb{k} \wedge$

$\ \ : z = 2 \ \ \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=s+1}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-\boldsymbol{l}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\boldsymbol{l}}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{j_i=\boldsymbol{l_{ik}}+j_{sa}^{ik}-\boldsymbol{l}-s+2}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-\boldsymbol{l}-s+1}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\ \sum_{j_i=s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{\cdots,j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(j_i + j_{sa} - s)} \sum_{j_i = s+1}^{\boldsymbol{l_s} + s - \boldsymbol{l}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(\boldsymbol{l_i}-\boldsymbol{l_i})!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{l_i}-j_i)!}+$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}}^{(\quad)}\ \sum_{(j^{sa}=j_{sa}+1)}^{(\quad)}\ \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\ \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{is}+j_s)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} +}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(\ )} \sum_{(j^{sa} \quad -s)} \sum_{=s+1}^{\boldsymbol{l_s} + s - \boldsymbol{l}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(\quad +1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \quad + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \quad + j_{ik} - j^{sa} \quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - \quad - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \quad - \mathbb{k}_1 - \mathbb{k}_2) \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \quad \boldsymbol{l} \wedge \boldsymbol{l_i} \quad D + s \quad \wedge$

$1 \leq \quad \leq j_{ik} - j_{sa}^{ik} + \quad j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad ^{ik} \leq j^{sa} \leq \quad + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} \quad ^{k} + 1 = \boldsymbol{l_s} \quad \boldsymbol{_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \quad \boldsymbol{l} = \mathbb{k} > 0 \wedge$

$\quad < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j_i+j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+s-j_{sa}-j_i}
$$

$$
\frac{(n_i - n_{i\mathbb{k}} - 1)!}{(j_s - 2)! \cdot (\quad - j_s + 1)!} \cdot
$$

$$
\frac{- n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(\quad - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-1)!\cdot(\ \ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\ \ -\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\ \ )!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}\ \ _{a}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge\ \ +s-j_{sa} \leq\ \ \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{\ \ }=\boldsymbol{l_{ik}} \wedge\ \ +j_{sa}-s>\ \ \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1\ \ _{sa}^{is} < j_{sa}^{ik}-1$

$\boldsymbol{s}\colon\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\ \ j_{sa},\cdots,j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=\ \ +\mathbb{k} \wedge$

$\mathbb{k}_z\colon z=2 \wedge \mathbb{k}=\mathbb{k}_{\ \ }+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-\boldsymbol{l}-s+1)}\ \sum_{(j^{sa}=j_{sa}+1)}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-\boldsymbol{l}-s+1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{\cdots,j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{j_i = j^{sa} + s - j_{sa}}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(\quad\boldsymbol{l_i})!}{(D+j_{\quad}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot\quad j_i)!}-$$

$$\sum_{l(j_s}^{(\ )}\sum_{-j_{sa}^{ik}+1)}$$

$$+j_{sa}-\boldsymbol{l})$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-}\sum_{(j^{sa}=j_{sa}-1)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$(n_i-j_{\quad}1)$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<\quad\wedge\boldsymbol{l}\neq\ \ _i\boldsymbol{l}\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=\ldots-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+\ldots-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+\ldots}^{\boldsymbol{l_i}\ldots+1}
$$

$$
\sum_{n\ldots+\mathbb{k}}^{n} \sum_{(n_{is}=\ldots-j_s+1)}^{(\ldots-j_s+1)} \sum_{n_{ik}\ldots-j_{ik}+1}^{\ldots+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{\ldots=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j\ldots-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} \ldots_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \quad \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \quad \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \quad \sum_{n_{ik}=n_{is}+}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{}_{sa})}^{(\ )} \quad \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j_{}-\mathbb{k}_1-\mathbb{k}_{}-j_{sa})!}{(n_i-\mathbb{k}_1-\mathbb{k}_{})!\cdot(\boldsymbol{n}_{}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}_{}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{} \leq j_i + j_{sa} - s \wedge j_i + j_{sa} - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} \leq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq < n \wedge I = \mathbb{k} \wedge 0 \wedge$

$j_{sa} \leq j_{sa}^{i} \wedge j_{sa}^{ik} = j_s - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} + \mathbb{k} \wedge$

$z = \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (j_s - n_{is} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j$ $-s>\boldsymbol{l}$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}<j_{sa}^{ik}-$ $\wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots$ $sa\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - \quad)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\quad \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \quad - \boldsymbol{l} + 1)! \cdot (\quad - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_s} - s)!}{(j^{sa} + \boldsymbol{l_i} - \quad)! \cdot (j_i + \quad - j^{sa} - s)!} \cdot$$

$$\frac{(D - \quad)!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{\quad} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\quad)}$$

$$\sum_{k=j_{sa}^{ik}+1}^{\boldsymbol{l_s} + j_{sa}^{ik}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\quad)} \sum_{j_i = j^{sa} + s - j_{sa}} \cdot$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1} \cdot$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i} \cdot$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz = \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+1)} \sum_{(j_s=2)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+1)} \sum_{(j_{ik}+j_{sa}-j_{sa})}^{(\boldsymbol{l_i}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} - j_{sa} + 2)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum^{(\ )} \sum$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum^{(n_i - j_s + 1}$$

$$\sum^{(\ )} \sum$$

$$\frac{(n_i + j^{sa} - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \ldots \boldsymbol{l} \wedge \boldsymbol{l_i} \ldots D + s - \ldots \wedge$

$1 \leq \ldots \leq j_{ik} - j_{sa}^{ik} + \ldots \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \ldots \leq j^{sa} \leq \ldots + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - \ldots + 1 = \ldots \boldsymbol{sa} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < \ldots \boldsymbol{l} = \mathbb{k} > 0 \wedge$

$\ldots < j^i \ldots 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}-j^{sa}-j_i}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_{sa}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

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$$D > \boldsymbol{n} < n$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-)!}$$

$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$$

$$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \geq j_{ik} \leq j^{sa}-j_{sa}^{ik}-j_{sa}$$

$$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j_{ik}+s-j_{sa} \leq j_i < \boldsymbol{n} \wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l}+j_{sa}-s>1 \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$$

$$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{is} < j_{sa}^{ik}-1$$

$$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$$

$$s > 4 \wedge \boldsymbol{s}=\cdots+\mathbb{k} \wedge$$

$$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{lk}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s\ , j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(j_i + j_{sa} - s)} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_{sa}} + s - \boldsymbol{l} - j_{sa} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_{s}-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}_{\boldsymbol{s}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}}+s)!\cdot(j_i+j_{sa}-\cdots-s)!}\cdot$$

$$\frac{(\cdots-\boldsymbol{l_i})!}{\cdots-\boldsymbol{n}-\cdots!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\cdots=\boldsymbol{l}}^{\cdots}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{}$$

$$\sum_{=j^{sa}+j_{\cdots}}^{}\sum_{(\cdots-j_{sa}+1)}^{(\cdots-\boldsymbol{l}+1)}\sum_{j_i=\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+2}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_{s}-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-} \sum^{(\ )}_{(j^{sa}=j_i+j_{sa}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{=\boldsymbol{n}+\mathbb{k}-j_s)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum^{(\ )}_{(n_{sa}=n_{ik}+} \sum_{-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n}$ $\wedge \boldsymbol{l} \neq$ $_{\boldsymbol{i}}\boldsymbol{l} \wedge$ $\leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik}$ $^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

j_{ik} $+ j_{sa}$ $_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} +$ $= \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=j_{sa}+1)}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}} \sum_{j_i=\boldsymbol{n}-D}^{\ }
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i+1}^{n_{is}+j_s-n_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(\ =\boldsymbol{n}-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}} \sum_{-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(-j_s)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=j_{sa}+1)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+2}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{ik}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} - 1)!} \cdot$$

$$\frac{(n_{ik} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_s} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-$ $\wedge j_{sa}^{s} < j_{sa}$ $1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots,$ $\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+$ $\wedge$

$\mathbb{k}_-: z=2 \wedge$ $=\mathbb{k}_1+$ $\Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i+j_{sa}-s)}\sum_{(j^{sa}=j_{sa}+1)}^{\boldsymbol{l_s}+s-\boldsymbol{l}}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s + \mathbb{k} - \boldsymbol{n} - 1)!}{(n_s + \mathbb{k} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + \boldsymbol{l} - \boldsymbol{l_{sa}})!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D + \boldsymbol{l_i})!}{(D + \mathbb{k} - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{j_i = \boldsymbol{l_s} + s - \boldsymbol{l} + 1}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(\quad\boldsymbol{l_i})!}{(D+j_{\quad}-\boldsymbol{n}-\boldsymbol{l_i})!\quad j_i)!}-$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{\quad}}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{\quad}+1)}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<\quad\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1\wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{\boldsymbol{l}=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
(\boldsymbol{l_i}+\boldsymbol{l}_{sa}-D-s-1) \qquad 1
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa}+} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}
$$

$$
n \qquad -j_s+1) \qquad j_{ik}-\mathbb{k}_1
$$

$$
\sum_{n_i=\boldsymbol{n}+} \sum_{n_s=\boldsymbol{n}+\mathbb{k}-} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}
$$

$$
+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i
$$

$$
\sum_{sa}=\boldsymbol{n}-j^{sa}+1) \quad \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{k - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}}^{(n_{ik}+j_{ik}} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (\quad j_s + 1)!} \cdot$$

$$\frac{- n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}-j_{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j_{sa}+s-j_{sa} \leq j_i < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l}+j_{sa}-s>\boldsymbol{l} \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k}$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,\,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{(j^{sa}=j_{sa}+1)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - \quad)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\quad \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \quad - \boldsymbol{l} + 1)! \cdot (\quad - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_s} - s)!}{(j^{sa} + \boldsymbol{l_i} - \quad)! \cdot (j_i + \quad - j^{sa} - s)!} \cdot$$

$$\frac{(D - \quad)!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j^{sa} - \quad - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \quad_{\boldsymbol{i}} \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

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$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\mathbb{k}_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = j_{sa} + 1)}^{(\boldsymbol{n} + j_{sa} - j_{sa} - 1)} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - \quad +$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s=j \quad j_{sa}^{ik}+1)}$$

$$(\boldsymbol{l_s} + \quad - \boldsymbol{l})$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \quad \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}- \quad) \; j_i=j^{sa}+s-j_{sa}}$$

$$n \qquad \qquad n_{is} \quad -j_{ik}-\mathbb{k}_1$$

$$\sum_{n_i=\boldsymbol{n}} \quad \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}_2+1) \; n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}$$

$$\quad +j_{ik}-j \quad +\mathbb{k}_2) \; n_{sa}+j^{sa}-j_i$$

$$\sum_{a=\boldsymbol{n}-j^{sa}+1)} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{ - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j_{sa}-\boldsymbol{n}-\mathbb{k}_1-\boldsymbol{l_i}-j_{sa})!}{(\boldsymbol{l_i}-\boldsymbol{n}-\mathbb{k}_1-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik} \leq 1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 = \boldsymbol{l_i} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D+\boldsymbol{n}-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge s = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} - 1)!} \cdot$$

$$\frac{(n_{ik} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_i - n_{is} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}}+s)!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_i}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_{i}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_{i})!}\cdot$$

$$\frac{(n_{s}-1)!}{(n_{s}+j_{i}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_{i})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_{s}-\boldsymbol{l}+1)!\cdot(j_{s}-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_s}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_{i}-\boldsymbol{l_{sa}})!\cdot(j_{i}+j_{sa}-j_{i}-s)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l_i})!}{(j_{i}-j_{i}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_{i})!}\cdot$$

$$\sum_{j_{ik}=\boldsymbol{l}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{n}+j_{sa}^{ik}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\sum_{(j_s=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_{i}-n_{is}-1)!}{(j_{s}-2)!\cdot(n_{i}-n_{is}-j_{s}+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_{s}-1)!\cdot(n_{is}+j_{s}-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_{i}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_{i})!}\cdot$$

$$\frac{(n_{s}-1)!}{(n_{s}+j_{i}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_{i})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}-} \sum_{=\boldsymbol{n}+\mathbb{k}-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+} \sum_{-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i + \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n}$ $\wedge \boldsymbol{l} \neq$ $_{\boldsymbol{i}}\boldsymbol{l} \wedge$ $\leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik}$ $^{ik} + 1$ $j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

j_{ik} $+ j_{sa}$ $_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} +$ $= \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-n_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(\ =\boldsymbol{n}-j^{sa}+1)}^{(\ +j_{ik}-j^{sa})} \sum_{\ -j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(-j_s)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{is}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j$ $-s>$ $\wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-$ $\wedge j_{sa}^{s}<j_{sa}$ $1 \wedge$

$\boldsymbol{s}$: $\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,$ $\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+$ $\wedge$

$\mathbb{k}_-: z=2 \wedge$ $=\mathbb{k}_1+$ $\Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + \quad - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\quad - \boldsymbol{l} - 1)!}{(\quad - j_s - \boldsymbol{l} \quad)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + \quad - \boldsymbol{l_{sa}}}{(j^{sa} + \boldsymbol{l_i} \quad - \boldsymbol{l_{sa}}) \quad (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D \quad \boldsymbol{l_i})!}{(D + \quad - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} - j_{sa} + 2)} \sum_{(j_s = \boldsymbol{l_i} + \boldsymbol{n} - D - s + 1)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1}^{} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\quad)} \sum_{j_i = j^{sa} + s - j_{sa}}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k}_2 - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(\quad \boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot\quad j_i)!}-$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+2}\ \sum_{j_i=\quad -D-s+1)}^{}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\quad)}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{}$$

$$\sum_{\quad=\boldsymbol{n}+\mathbb{k}}^{(n_i-\quad 1)}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}^{}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} <$ $\wedge\ \boldsymbol{l} \neq\ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{\boldsymbol{l}+\boldsymbol{n}-D-s)} \sum_{=2)}
$$

$$
\sum_{j_{ik}=j_s+j} \sum_{(j^{sa}=j_{ik}+j_{sa}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+} \sum_{i_s=\boldsymbol{n}+\mathbb{k}-} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}
$$

$$
\sum_{a=\boldsymbol{n}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(\quad - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} -j_{ik}+1$$

$$(n_{ik}+j_{ik}-) n_{sa}^{sa}-j_i$$

$$\sum_{(n_{sa}=\boldsymbol{n}}^{} \sum_{sa}+1) \quad n_s=\boldsymbol{n}-j_i$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - \boldsymbol{n} - j_s + 1)!} \cdot$$

$$\frac{n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}-j_{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j_{sa}+s-j_{sa} \leq j_i < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l}+j_{sa}-s>\boldsymbol{l} \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}=j_{sa}-1 \wedge j_{sa}^{s}-j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1-j_{sa}^{ik}, \mathbb{k}_2, j_s \cdots, j_{sa}^{i}\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+$

$\mathbb{k}_z: z- \wedge \mathbb{k}=\mathbb{k}_1+ \Rightarrow$

$$fz S_{j_s,\,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}\ \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - \quad)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\quad \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \quad - \boldsymbol{l} + 1)! \cdot (\quad - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_s} - s)!}{(j^{sa} + \boldsymbol{l_i} - \quad)! \cdot (j_i + \quad - j^{sa} - s)!} \cdot$$

$$\frac{(D - \quad)!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} - \boldsymbol{l} + 1)} \sum_{(j_s = \boldsymbol{l_i} + \boldsymbol{n} - D - s + 1)}$$

$$\sum_{j_{ik} \quad + j_{sa}^{lk} - 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\quad)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \quad_{\boldsymbol{i}} \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

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$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S}{}_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{n} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{ik}-j_{sa}}\sum_{(j^{sa}+j_{ik}+j_{sa}-s)}\sum_{j_i=j^{sa}+s-\boldsymbol{l}-j_{sa}+1}\sum_{\boldsymbol{l}=D}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(\boldsymbol{n}-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D > \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$1 \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{\boldsymbol{l}=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{i}}^{j_{sa}^{ik}+1)}
$$

$$
(\boldsymbol{l_{ik}}^{} \quad -\boldsymbol{l}-j_{sa}^{ik}+1) \quad {}^{1}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{il}} \quad \sum_{(j^{sa}=j_{sa}+} \quad \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}
$$

$$
{}^{n} \quad -j_s+1) \quad {}^{j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \quad \sum_{=\boldsymbol{n}+\mathbb{k}-j} \quad \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}
$$

$$
+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i
$$

$$
\sum_{sa=\boldsymbol{n}-j^{sa}+1)} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+}^{} \sum_{-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa})}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}^{}$$

$$\frac{(n_i+j_{sa}-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \geq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq \boldsymbol{l_{ik}} - 1 \wedge$

$1 \leq j_{sa} \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j^{sa} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \leq j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{ik}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_{ik}} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}}^{(n_{ik}+j_{ik}} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (\quad j_s + 1)!} \cdot
$$

$$
\frac{- n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(\quad - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1}{(\boldsymbol{l_s} - j_s - 1)! \cdot (\quad - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \quad - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - \quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq \ _{\boldsymbol{i}}\boldsymbol{l} - \quad \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq \quad \leq j^{sa} + j_{sa}^{ik} \quad j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + \quad j_{sa} \leq j_i \leq \quad \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + \quad - j_{sa} = \boldsymbol{l_{ik}} \quad \boldsymbol{l_i} + j_{sa} \quad \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s \quad \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \quad > 0 \wedge$

$j_{\quad} \leq j_{sa}^{i} - \quad j_{sa}^{ik} = j_s \quad - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \quad j_{sa}, \cdots, \quad\}$

$s > 4 \wedge \quad = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \quad = \mathbb{k}_1 + \quad \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_i-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} -$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} -$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} -$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} - j_{sa} + 2)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ \ )} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l}-1)}{(\boldsymbol{l_s}-\boldsymbol{l}+1)(-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_s}-s)!}{(j^{sa}+\boldsymbol{l_i}-)!\cdot(j_i+-j^{sa}-s)!}$$

$$\frac{(D-}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}-j_{sa}+2)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}+j_{sa}^{lk}-1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

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$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz\left(j_{ik}, j^{sa}, j_i\right) \sum_{\boldsymbol{l}=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 2)} \sum_{(j_s=2)}^{} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-\boldsymbol{l_{sa}})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{j_{ik}=j_s}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_s+2)}\ \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-j_{sa})}^{(\ )}$$

$$\sum_{j_{ik}=j_s}^{\ -1}\ (j^{sa}=\ +j_{sa}-j_{sa}^{ik})\ j_i=\ -j_{sa}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\ (n_{is}=\boldsymbol{n}+\ -j_s+1)\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(\ -\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\ \ n\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_i\ -j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}\ -j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}} \sum_{j_i=} \sum_{n_i=\boldsymbol{n}+} \sum_{(n_{sa}=\boldsymbol{n}} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n} \sum_{(n_i-j_s} \sum_{j_s+1)} \sum_{n_{is}+j_s-j_{ik}} \sum_{\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1} \sum_{+j_{ik}-j} \sum_{j^{sa}-j_i} \sum_{a+1)}
$$

$$
\boldsymbol{l_{ik}} \sum_{-\boldsymbol{l}-s+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \quad)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} \quad s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(\quad a - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{ik}}+j_{sa}^{ik}-\boldsymbol{l}-s}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}}^{(n_{ik}+j_{ik}} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (\quad j_s + 1)!} \cdot$$

$$\frac{- n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-\boldsymbol{l}-s+1} \sum_{j_i=s+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}-j_{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j_{ik}+s-j_{sa} \leq j_i < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l}+j_{sa}-s=\boldsymbol{l} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{is} < j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s}=\cdots+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_{ik}=j_{sa}^{ik}+1}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\boldsymbol{l_{sa}}+j^{sa}-\boldsymbol{l_{ik}})!\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - \quad)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\quad \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \quad - \boldsymbol{l} + 1)! \cdot (\quad - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - \quad)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \quad)! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \quad - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\quad)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\quad)} \sum_{j_i = s+1}^{\boldsymbol{l_s} + s - \boldsymbol{l}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \quad_{\boldsymbol{i}} \boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S}_{j_{sa}^{ik}} = \sum_{\boldsymbol{l}} \sum_{(j_s \ldots - j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}-j_{sa}} \sum_{(\ldots=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+\ldots-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i \ldots +1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-\boldsymbol{l}-s+2)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j^{sa}=j_{ik}-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}_1+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j_{ik}+1)}^{(n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\ -j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{s}\ )}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j\ \ -\ \ \mathbb{k}_1-\mathbb{k}\ \ -j_{sa})!}{(n_i-\ -\mathbb{k}_1-\ )!\cdot(\boldsymbol{n}\ \ -j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\ +1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D\ \ j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq \ + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \ 1 \leq j_{ik} \leq \ ^{a} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + \ - j_{sa}^{ik} \leq j^{s}\ \ j_i + j_{sa} - s \wedge \ \ s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \ \wedge \boldsymbol{l_{sa}} + \ ^{ik} - j_{sa} \ \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \ < n \wedge I = \mathbb{k}\ \ 0 \wedge$

$j_{sa} \leq j_{sa}^{i}\ \ 1 \wedge j_{sa}^{ik} = j_{s}\ \ 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j^{s}\ \ \cdot, \mathbb{k}_1, j_{sa}\ \ j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s}\ \ + \mathbb{k} \wedge$

$\ z = 3\ \ \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_{ik} - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\boldsymbol{l_{sa}}+j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\ldots S_{\ldots, j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-_{ik}-j_{sa}\right)!}$$

$$\frac{(D-}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(}-$$

$$\sum^{(\ )}\sum_{j_{sa}^{ik}+1)}$$

$$\boldsymbol{l_{ik}}-$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}\ \sum_{(j^{sa}+j_{sa}-j_{sa}^{ik})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}\ \sum^{(n_i-1)}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum^{(\ )}_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$>\boldsymbol{n}\ldots\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{\boldsymbol{l}=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{j_{ik}+j_{sa}-j_{sa}}^{(\boldsymbol{l_{sa}}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{sa=\boldsymbol{n}-j^{sa}+1)}^{+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-1}^{\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}-j^{sa}+\mathbb{k}_2)}^{(\ )}\sum_{j^{sa}=j_i}$$

$$\frac{(n_i+\quad^{sa}-j_i-\quad-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1\quad\mathbb{k}_2)!\cdot(\boldsymbol{n}\quad j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}\quad j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\quad\wedge\boldsymbol{l_i}\leq D+s-\quad\wedge$

$1\leq j_s\leq j_{ik}\quad_{sa}^{ik}+1\wedge\quad+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}\quad j_{sa}-j_{sa}^{ik}\leq j\quad\leq j_i+j_s\quad\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}\quad1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}\quad j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge\quad=\mathbb{k}>\quad\wedge$

$j_{sa}\quad j_{sa}^{s}\quad1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\cdots,\quad,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}\sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (j_s - n_{is} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{k + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ \ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j$ $-s=\boldsymbol{l}$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}<j_{sa}^{ik}-$ $\wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots$ $sa\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - \quad)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\quad \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \quad - \boldsymbol{l} + 1)! \cdot (\quad - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} \quad)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} \quad)! \cdot (j^{sa} + j_s \quad - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i} \quad)!}{(D + j_i \quad \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} - \boldsymbol{l} + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} \quad s + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\quad)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \quad_{\boldsymbol{i}} \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

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$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{z}S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{sa}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{(j_{sa} = j_i + j_{sa} - s)}^{(\ )} \sum_{j_{ik} = j_{ik} + s - \boldsymbol{l} - j_{sa}^{ik} + 2}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}_1}^{n} \sum_{n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(\ )} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(\ )} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_i - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+}^{} \sum_{-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa})}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}^{}$$

$$\frac{(n_i+j_{sa}-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + j_{sa} - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} \geq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_i - \boldsymbol{n} < \boldsymbol{l_i} \leq D - \boldsymbol{l_s} + s - j_s - 1 \wedge$

$\boldsymbol{n} \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_i - 1 \wedge j_{sa}^{s} \leq j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$\mathbb{k} > 4 \wedge \mathbb{k} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{ik} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\boldsymbol{l_{sa}}+j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{\boldsymbol{k=l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{j_{ik} - j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s)}^{(\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}-\boldsymbol{l_i})!}{\boldsymbol{n}-\boldsymbol{l_i}\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{=j_{sa}^{ik}+1}\sum_{j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(\boldsymbol{l_{ik}} + j_{sa} - j_{sa}^{ik} + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{n_{sa} = n_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i + \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$j_{sa} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=}^{a}{}^{+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-}^{n_{is}+j_s-\ \ -\mathbb{k}_1}
$$

$$
\sum_{(\ \ =\boldsymbol{n}-j^{sa}+1)}^{+j_{ik}-j^{s}\ \ )} \sum_{-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_{\ \ }-n_{is}-1)!}{(j_s-2)!\cdot(n_{\ \ }-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{\ \ }-\mathbb{k}_1-1)!}{-j_s-1)!\cdot(\ \ +j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{s}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{i}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1}{(j_{ik}-j_s-1)}$$

$$\frac{(n_{ik}}{(j^{sa}-j_{ik}}$$

$$\frac{}{(j_i-j^{sa}-1)}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-$ $\wedge j_{sa}^{s}<j_{sa}$ $1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots,$ $\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+$ $\wedge$

$\mathbb{k}_-: z=2 \wedge$ $=\mathbb{k}_1+$ $\Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1}\ \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(\ldots - 1)!}{(n_s + \ldots - \boldsymbol{n} - 1)! \cdot (\ldots - j_i)!} \cdot$$

$$\frac{(\ldots - \boldsymbol{l} - 1)!}{(\ldots - j_s - \boldsymbol{l} - 1)! \cdot (j_s - 2)!}$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + \ldots - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s}^{\boldsymbol{l_i} + \ldots + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l} - s + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-\text{[illegible]})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\text{[illegible]}-j_{sa}\right)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\text{[illegible]}-j_i)!}-$$

$$\sum_{\text{[illegible]}}\sum_{(j_i=\text{[illegible]}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\text{[illegible]}\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}\text{[illegible]}k+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{\text{[illegible]}=\boldsymbol{n}+\mathbb{k}}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-\text{[illegible]}1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\text{[illegible]}>\boldsymbol{n}\text{[illegible]}\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

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$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{\quad\ \ (j_s=j_{ik}} \quad\quad +1)
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \quad \sum_{(j^{sa}=}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+} \quad \sum^{\quad\quad -j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \quad \sum_{(n_{is}=}^{(n_i-j_s} \quad \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)}\ \sum_{j_i}^{sa+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}\ \sum_{n_{sa}+j^{sa}-j_i}$$

$$\sum_{sa=\boldsymbol{n}-j}\ \sum_{\boldsymbol{n}-j_i+1}$$

$$\frac{(\ -n_{is}-1)!}{(j_s-2)!\cdot(\ -n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{ik}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_s)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}-s)!\cdot(j_s-2)!}$$

$$\frac{(D-\boldsymbol{n}-1)!}{(D+j_{sa}^{ik}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j^{ik}_{sa} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_{ik}+j_{sa}-s \wedge j^{sa}+j_{sa}-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge \mathbb{k} = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j_{sa}^{ik} < j_{sa}^{ik}-1 \wedge$

$\cdots\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s \wedge \mathbb{k} \wedge$

$\mathbb{k}_2 \subseteq \mathbb{k} = \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fz S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{\left(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s\right)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_i-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_s - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j_{sa} - \boldsymbol{l_{ik}})! \cdot (j_{sa}^{ik} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

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$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$j_{\dots, j_{ik}, j^{sa}, \dots} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l}_{\boldsymbol{i}}-D-s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}+j_{sa}^{ik}-1}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{k=1}^{(\boldsymbol{l}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-\boldsymbol{l}-s+1)}^{} \sum_{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)}^{} \sum_{j_{ik}=j_s+j_{sa}^{ik}-\cdots}^{} \sum_{j_{sa}=j_{ik}+j_{sa}-\cdots}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^{}$$

$$\sum_{\cdots}^{n} \sum_{\cdots-j_s+\cdots}^{} \sum_{n_{is}=\cdots-j_{ik}-\mathbb{k}_1}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\cdots}^{} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}+\cdots-1)}^{} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{}$$

$$\sum_{\cdots+j_{ik}-j_{\cdots}+\mathbb{k}_2)}^{} \sum_{n_{sa}+j^{sa}-j_i}^{}$$

$$\sum_{a=\boldsymbol{n}-j^{sa}+1)}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(\quad - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_s}$$

$$\frac{(n_i+j_{ik}-j_{ik}-\mathbb{k}_1-j_{sa}-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(n_{sa}-j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \geq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 = \boldsymbol{l_i} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+\boldsymbol{l_{sa}}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+\boldsymbol{l_i}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(\boldsymbol{l_{ik}} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\boldsymbol{l_{sa}}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\ \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l}-\boldsymbol{l_i})!}{(\boldsymbol{n}-\boldsymbol{l}-\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\sum_{=j_i+j_{sa}-s)}^{(\quad)}\sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} + j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j_i = j_i + j_{sa} - s)}^{(\ )} \sum_{j_i = \boldsymbol{l_s} + \boldsymbol{n} + s - D - j_{sa}}^{\boldsymbol{l_s}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i + \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} - 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{j_i=\boldsymbol{l_{sa}}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_{is}+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-n_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}+1)} \sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j$ $-s=\boldsymbol{l}$ $\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}$ $1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-$ $\wedge j_{sa}^{s}<j_{sa}$ $1 \wedge$

$\boldsymbol{s}$: $\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,$ $\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+$ $\wedge$

$\mathbb{k}_-: z=2 \wedge$ $=\mathbb{k}_1+$ $\Rightarrow$

$$fz S_{j_s\,,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s + \boldsymbol{n} - 1)!}{(n_s + \boldsymbol{n} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l} - \boldsymbol{l} - 1)!}{(j_s - \boldsymbol{l} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j_{sa} - \boldsymbol{l_{ik}})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + \boldsymbol{n} - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l}} \sum_{(j^{sa} = \boldsymbol{l_s} + j_{sa} - \boldsymbol{l} + 1)}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\right.}$$

$$\frac{(D-}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(}-$$

$$\sum_{(}^{(\ )}\sum_{j_{sa}^{ik}+1)}$$

$$(\boldsymbol{l_{sa}}-\boldsymbol{l})$$

$$\sum_{=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$(n_i-1)$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$>\boldsymbol{n}-\ \wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1\wedge$$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{\boldsymbol{l}=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{} \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}-}^{(\ \ \ \

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{+1}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j}^{(n_{ik}+j_{ik}-\mathbb{k}_2)\ n_{sa}+j^{sa}-}\ \sum_{\boldsymbol{n}-j_i+1}$$

$$\frac{(n_{is}-1)!}{(2)!\cdot(-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-\mathbb{k}_1-1)!}{(j_{ik}-1)!\cdot(+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1 \quad -j_s)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)\quad (\boldsymbol{n}+j^{sa}\quad -j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l}_{\boldsymbol{j}}-\boldsymbol{l}-1)!}{j_i-\boldsymbol{l}+\quad)!\cdot(j_s-2)!}$$

$$\frac{(D}{(D+\quad-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j^{ik}\quad < j_{ik} \leq \quad a+j_{sa}^{ik}-j\quad \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i\quad sa}-s \wedge j^{sa}\quad -j_{sa}-j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}\quad >\boldsymbol{l_{ik}} \wedge \boldsymbol{l}\quad j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{\quad}-\boldsymbol{n}<\boldsymbol{l_{sa}}\quad D+\boldsymbol{l_s}+j_{sa}\quad -1$

$D\quad \boldsymbol{n}<n \wedge \quad =\mathbb{k}>0$

$j_{sa}\quad j_{sa}^{i}-1 \wedge j_{sa}^{ik}\quad j_{sa}-1\quad \quad <j_{sa}^{ik}-1 \wedge$

$\quad :\{j_{sa}^{s},\quad \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{s}\quad \cdots, j_{sa}^{i}\} \wedge$

$s>4 \wedge \boldsymbol{s}=\quad \mathbb{k} \wedge$

$\mathbb{k}_{\quad}=\quad \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\boldsymbol{n}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{(n_s + \quad - \boldsymbol{n} - 1)!}{(\quad - j_i)!} \cdot$$

$$\frac{(\quad - \boldsymbol{l} - 1)!}{- j_s - \boldsymbol{l} \quad)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{\quad} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{\quad} - \boldsymbol{l_{ik}})! \cdot (\quad a + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + \quad - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{\quad} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa}}^{\boldsymbol{l_s} + \quad - \boldsymbol{l}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S}{}_{j_{sa}, j_{ik}, j^{sa}, j_i} = \sum_{\boldsymbol{n}=2}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}+j_{sa}^{ik}+2)} \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-\boldsymbol{l}-j_{sa}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_s}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{} \cdot$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}-j_s+1}^{n} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_{ik}-\mathbb{k}_1}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{} \cdot$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \cdot$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\mathbb{k}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j_{sa}-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}-j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}-s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 = \boldsymbol{l_{sa}} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \geq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+\boldsymbol{l_{sa}}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}-j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$n \geq 4 \wedge s = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)!\cdot(n_i-n_{is}}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_}{(j_{ik}-j_s-1)!\cdot(}$$

$$\frac{(n_{ik}-n_{sa}-1)}{(j^{sa}-j_{ik}-1)!\cdot(}$$

$$\frac{sa}{(j_i-j^{sa}-1)!\cdot(}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{k+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\boldsymbol{l_{sa}}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}\ \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$fz S_{j_s\ , j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{j_{ik} = j_{sa}^{ik} + 1}^{(\ \ )} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{\boldsymbol{l_i} - \boldsymbol{l} + 1} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{n} \sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{(n_i - j_s + 1)} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{n_{sa} + j^{sa} - j_i} \sum_{n_s = \boldsymbol{n} - j_i + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_{i}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_{i})!}\cdot$$

$$\frac{(n_{s}-1)!}{(n_{s}+j_{i}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\text{[illegible]}}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_{s}-\boldsymbol{l}+1)\text{[illegible]}(j_{s}-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\text{[illegible]}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\text{[illegible]}^{sa}+j_{sa}^{ik}-\text{[illegible]}j_{sa})!}\cdot$$

$$\frac{(D\text{[illegible]}\boldsymbol{l_i})!}{\text{[illegible]}\boldsymbol{n}-\boldsymbol{l_i}\text{[illegible]}(\boldsymbol{n}-j_{i})!}$$

$$\sum_{\text{[illegible]}=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{\text{[illegible]}=j^{sa}+j_{sa}}\sum_{\text{[illegible]}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{\text{[illegible]}i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_{s}-\boldsymbol{l}+1)!\cdot(j_{s}-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\ {}_{i}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1\leq\boldsymbol{l}\leq\ {}_{i}\boldsymbol{l}-1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S}_{j_{ik}, j_{sa}^{ik}, j_{sa}^{i}} = \sum_{\boldsymbol{l}} \sum_{(j_s = j_{sa} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{j_{sa} + j_{sa}^{ik} - \boldsymbol{l}} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\ )} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )}\sum_{(j^{sa}=j_i+j_{sa}}\sum_{}^{s+s-\boldsymbol{l}}\sum_{}^{\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_i-j_s+1)}\sum_{n_{ik}=}\sum_{}^{j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=}^{(\ )}\sum_{j_{ik}-j^{sa}}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_{}-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\mathbb{k}_1-\mathbb{k}_{}\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\neq\boldsymbol{l}\wedge\boldsymbol{l_s}\leq\boldsymbol{n}-\boldsymbol{n}-1\wedge$

$D+\boldsymbol{l}_{}s-\boldsymbol{n}-\boldsymbol{l_i}+\leq\boldsymbol{l}\leq{}_{i}\boldsymbol{l}-1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\ldots_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}\ldots_s-j_{sa}^{ik}\leq j^{\ldots}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\ldots=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$\ldots<\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=}^{\ \ +s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-}^{n_{is}+j_s-\ \ -\mathbb{k}_1}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{\ \ }_{\ \ }\ \ \ \

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1 \quad -j_s)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\,(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{-\boldsymbol{l}+)!\cdot(j_s-2)!}$$

$$\frac{(D-}{(D+\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s \quad j_{sa}^{ik}-1 \leq j_{ik} \quad j^{sa}+j_{sa}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa} \quad \wedge j^{sa}+s \quad j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} \quad {}^{ik}+1=\boldsymbol{l_s} \quad +j_{sa}^{ik}-j_{sa} \quad \wedge \quad +j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \quad s-\boldsymbol{n} < \quad \leq D+\boldsymbol{l_s} \quad s-\boldsymbol{n}-1 \wedge$

$D \quad \boldsymbol{n} < n \wedge I=\mathbb{k} \quad 0 \wedge$

$\quad a \leq j_{sa}^{i} \quad 1 \wedge j_{sa}^{ik}=j_s \quad -1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s} \cdots, \mathbb{k}_1, j_{\quad} \quad a, \cdots, j_{sa}^{i}\} \wedge$

$s \quad 4 \wedge \boldsymbol{s} \quad s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \quad \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{\boldsymbol{n}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\ (\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq {}_{i}\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}> \wedge \boldsymbol{l_i}+j_{sa}-s \leq \boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}<j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s>4 \wedge \boldsymbol{s}= +\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}= +\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,\,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(\boldsymbol{l_{sa}} + j^{sa} - \boldsymbol{l_{ik}}\right)! \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik} + 2)} \sum_{(j_s = \boldsymbol{l_i} + \boldsymbol{n} - D - s + 1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{} \left(\sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )}\right) \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\colon \{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z\colon z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{j_{ik}=j_{sa}^{ik}+1}^{(\ \ )}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}\ \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{n}\ \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}-j_i}\ \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_{i}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_{i})!}\cdot$$

$$\frac{(n_{s}-1)!}{(n_{s}+j_{i}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\text{[illegible]}}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_{s}-\boldsymbol{l}+1)\text{[illegible]}(j_{s}-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\text{[illegible]}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\text{[illegible]}^{sa}+j_{sa}^{ik}-\text{[illegible]}j_{sa})!}\cdot$$

$$\frac{(D\text{[illegible]}\boldsymbol{l_i})!}{\text{[illegible]}\boldsymbol{n}-\text{[illegible]}\cdot(\boldsymbol{n}-j_{i})!}$$

$$\sum_{\text{[illegible]}\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\text{[illegible]}+j_{sa}^{ik}-j_{sa}}\sum^{(\text{[illegible]}}_{\text{[illegible]}+j_{sa}-s)}\sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{\text{[illegible]}i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_{s}-\boldsymbol{l}+1)!\cdot(j_{s}-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq {}_{i}\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S}_{j_{sa}, j_{ik}, j_{sa}^{ik}} = \sum_{\boldsymbol{l}} \sum_{(j_s = \boldsymbol{l}_s - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_s} + j_{sa}^{ik}} \sum_{(j^{sa} = j_{sa} - s)}^{(\ )} \sum_{j_i = \boldsymbol{l_{sa}} + \boldsymbol{n} + s - D - j_{sa}}^{\boldsymbol{l_{sa}} + s - \boldsymbol{l} - j_{sa} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\ )} \sum_{j_i = \boldsymbol{l_s} + s - \boldsymbol{l} - j_{sa}}^{\boldsymbol{l_s} - \boldsymbol{l}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_i = \boldsymbol{n} + \mathbb{k} - j_{sa})}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_i + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - j_{sa})}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} - 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq \boldsymbol{l_i} - 1 \wedge$

$1 \leq j_s \leq j_{ik} + j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=\boldsymbol{n}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-n_{ik}-\mathbb{k}_1}
$$

$$
\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_{is}-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{is}-\mathbb{k}_1-1)!}{(j_s-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - j_s}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)}$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{\cdot (j_s - 2)!}$$

$$\frac{(D -}{(D + \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s - j_{sa}^{ik} - 1 \leq j_{ik} - j^{sa} + j_{sa} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge j_{sa} + j_{sa}^{ik} - j_{sa} \wedge j_{sa} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D - j_{sa} - \boldsymbol{n} \leq \leq D + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$

$j_{sa} \leq j_{sa}^{s} - 1 \wedge j_{sa}^{ik} = j_s - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j \quad a, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} \quad s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \quad \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{i}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)\,(n_i - n_{is} + 1)!}\cdot$$

$$\frac{(n_{i} - n_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - j_s - 1)\,(n_{i} - n_{is} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!}\cdot$$

$$\frac{a} - n_s - 1)!}{(j_i - j^{sa} - 1)\,(n_{sa} + j^{sa} - n_s - j_i)!}\cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!}\cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l}$$

$$(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} >$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} -$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} -$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}$

$s > 4 \wedge \boldsymbol{s} =$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\boldsymbol{l_{sa}}+j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}\ \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\ )} \sum_{j_i = s+1}^{\boldsymbol{l_s} + s - \boldsymbol{l}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-\boldsymbol{l}+1)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{\boldsymbol{l_i}=\boldsymbol{l}}\sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j_{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{\left(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s}\right)! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{\ }}^{(\ )} \sum_{(j^{sa} = j_{\ }}^{\boldsymbol{l_s} + s - \boldsymbol{l}} \sum_{\ s+1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{\ } + \mathbb{k}}^{(n_i - j_s + 1)} \sum_{n_{ik} = \ }^{\ } \sum_{\ - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \ } \sum_{\ - j^{sa} - \ } \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_{\ } - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \ - \mathbb{k}_1 - \mathbb{k}_{\ }) \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ \boldsymbol{l} \wedge \boldsymbol{l_i} \leq \ + s \ \boldsymbol{n} \wedge$

$1 \leq j_{\ } < j_{ik} - j_{sa}^{ik} + 1 \ j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \ ^{ik} \leq j^{sa} \leq \ + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} \ + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \ I = \mathbb{k} > 0 \wedge$

$j_{\ } \ - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2} \sum$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+s-j_i} \sum$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(\boldsymbol{n} + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s - \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} <$ $_{a}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_{s}-1)!}{(n_{s}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}-1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}-1)!\cdot(j_{ik}-j_s-$$

$$\frac{(\boldsymbol{l}-\boldsymbol{l_i})!}{(\boldsymbol{n}-\boldsymbol{l}-$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_s=2)}^{-\boldsymbol{l}+1)}$$

$$\sum_{=\boldsymbol{l_s}+j_{sa}^{ik}}^{k-\boldsymbol{l}+1} \sum_{j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_{s}-1)!}{(n_{s}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\sum_{j_{sa}=j_{ik}+j_{sa}-j_s}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ )}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}-1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_s}-j_{sa}^{ik}-1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}<j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+}^{(n_i-j_s+1)} \sum_{\boldsymbol{n}+\mathbb{k}}^{n_{is}-j_{ik}-\mathbb{k}_1} j_{ik}+1
$$

$$
(n_{ik}+ \quad -j^{sa}-\mathbb{k}_2)\ n_{sa}+ \quad j_i
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is}}{(j_s-2)\ (n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is} \quad n_{ik}-\mathbb{k}_1 \quad 1)!}{(j_{ik} \quad j_s-1)!\cdot(n \quad +j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n \quad -n_{sa}-1)!}{sa-j_{ik} \quad 1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}
$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)}$$

$$\frac{(\boldsymbol{l}-1)!}{\boldsymbol{l}-1)!\cdot(j_s-2)!}$$

$$\frac{(D}{(D+\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 < j_{ik} \leq j_{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_{ik}+j_{sa}-s \wedge j^{sa}-j_{sa}-j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-1 = \boldsymbol{l_{ik}} \wedge \boldsymbol{l}$ $j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq$ $+\boldsymbol{l_s}+s-\boldsymbol{n}$ $\wedge$

D $\boldsymbol{n} < n \wedge$ $= \mathbb{k} >$

j_{sa} $j_{sa}^{i}-1 \wedge j_{sa}^{ik}$ $j_{sa}-1$ $< j_{sa}^{ik}-1 \wedge$

$\{j_{sa}^{s},$ $\mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{s}$ $\cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} =$ $\mathbb{k} \wedge$

$\mathbb{k}_2$ $=$ $\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa},j_i} = \sum_{\boldsymbol{k}=\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{-1)!}{(n_s + - \boldsymbol{n} - 1) - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l} - 1)!}{- j_s - \boldsymbol{l})! \cdot (j_s - 2)!}$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} +}{(j_s + \boldsymbol{l_{ik}} - \boldsymbol{l_s}) (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{\boldsymbol{k}=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\ )} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_s} + s - \boldsymbol{l}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

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$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{2\ldots,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_{ik}=j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}-j_i} \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=\boldsymbol{l}+1)}^{(\boldsymbol{n}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}-j_{sa}}\sum_{(j^{sa}+j_{sa}-\boldsymbol{l}+1)}^{j_{sa}-\boldsymbol{l}-s+1}\sum_{j_i=j^{sa}-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_i-j_{ik}-j^{sa}+j_{sa})}^{(\ )}\sum_{=n_i+j^{sa}-j_i}$$

$$\frac{(n_i-j^{sa}-j_i-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}-1 \wedge$

$1 < j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_{ik}+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j_i \leq j_i+j_{sa}-\boldsymbol{l} \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}-j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l} \leq D+\boldsymbol{l}+s-\boldsymbol{n}-1 \wedge$

$D > \boldsymbol{l} \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

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$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{}^{-j_{ik}+1}$$

$$\sum_{}^{(n_{ik}+j_{ik}-j} \sum_{}^{n_{sa}} \sum_{}^{sa}-j_i$$

$$\sum_{(n_{sa}=\boldsymbol{n}}^{a}+1) \sum_{n_s=\boldsymbol{n}-j_i}$$

$$\frac{(n_{is}-n_{is}-1)!}{(j_s-2)!\cdot(n_i}\cdot\frac{j_s+1)!}{}$$

$$\frac{-n_{ik}}{(j_{ik}-j_s-1)!}\cdot\frac{\mathbb{k}_1-1)!}{n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}}{(j^{sa}}\cdot\frac{n_{sa}-1)!}{n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(\boldsymbol{n} + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s - \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l}_s-\boldsymbol{l}-1)!}{(\boldsymbol{l}_s-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l}_{ik}-\boldsymbol{l}_s-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l}_{ik}-j_{ik}-1)!\cdot(j_{ik}-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l}_i-1)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l}_i)!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l}_s-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l}_i+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}}^{j_{sa}^{ik}-\boldsymbol{l}-s+1}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\quad-j_i)!}$$

$$\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s}^{(\boldsymbol{l_s}-\quad)}$$

$$\sum_{j_{ik}=j_s+\quad-1}^{(\quad)}\left(j^{sa}=\quad+j_{sa}-j_{sa}^{ik}\right)j_i=\quad-j_{sa}$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{n}\left(n_{is}=\boldsymbol{n}+\quad-j_s+1\right)\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(\quad-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D>\quad m\wedge\boldsymbol{l}\neq\quad\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$D+\boldsymbol{l_s}+s\quad\boldsymbol{n}-\boldsymbol{l_i}+1\leq\boldsymbol{l}\leq\quad\boldsymbol{l}-1\wedge$

$1\quad\quad-j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1\wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{j_s=2)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(\boldsymbol{l_i}+j_{sa}} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}
$$

$$
\sum_{a=\boldsymbol{n}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(\quad - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-}^{} \sum_{-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \sum_{-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j \quad -\mathbb{k}_1-\quad -j_{sa})!}{(\quad -n_i-\mathbb{k}_1-\quad)!\cdot(\quad -j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} < j_i+j_{sa}-s \wedge j^{sa}-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \geq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+ \quad -\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+ \quad -\boldsymbol{n}-1 \wedge$

$\geq \boldsymbol{n} < \quad \wedge I=\mathbb{k} > (\quad$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}-1 \wedge j_{sa}^{s}<j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$> 4 \wedge s \quad s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_2-1)!}{(j_{ik}-j_s-1)!\cdot(\quad+j_s-n_{is}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(\quad+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l}-j_{sa}^{ik}+1)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{\boldsymbol{k}=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_{s}-1)!}{(n_{s}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}-1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}-1)!\cdot(j_{ik}-j_s-$$

$$\frac{(\boldsymbol{L}-\boldsymbol{l_i})!}{(\boldsymbol{n}-\boldsymbol{l_i}-$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_s=2)}^{-\boldsymbol{l}+1)}$$

$$\sum_{}^{} \sum_{}^{-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_{s}-1)!}{(n_{s}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - j_{sa})}^{(\ j_{sa} - \boldsymbol{l})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s)}^{(\ j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{sa} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i + \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=\boldsymbol{l}^{sa}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_{is}+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-n_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}+1)} \sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-} \sum_{=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - 1)!} \cdot$$

$$\frac{(n_{ik} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} <$ $\wedge \boldsymbol{l_i}+$ $-s=$ $\wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}$ $1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-$ $\wedge j_{sa}^{s} < j_{sa}$ $1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots,$ $\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+$ $\wedge$

$\mathbb{k}_-: z = 2 \wedge$ $= \mathbb{k}_1 +$ $\Rightarrow$

$$ {}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(\boldsymbol{n} - 1)!}{(n_s + \boldsymbol{n} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(j_s - j_s - \boldsymbol{l} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D + \boldsymbol{l_i})!}{(D + \boldsymbol{n} - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{sa}}+j_{sa}-\boldsymbol{l}-j_{sa}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{(D-}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}\sum_{}^{}$$

$$\sum_{=j_s+j_{sa}^{ik}-1}^{}\ \sum_{}^{}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-1)}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}^{}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\boldsymbol{n}>\boldsymbol{n}<\ \wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$D+j_{sa}^{ik}-\boldsymbol{n}<\boldsymbol{l_{ik}}\leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1\wedge$$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{\ik-j_{sa}^{ik}+1)} \sum_{=2)}$$

$$(\quad) \qquad \boldsymbol{l_s}+$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{} \sum_{+j_{sa}-s)}^{} j_i \quad +s+\boldsymbol{n}-D-j_{sa}^{ik}$$

$$\sum_{-j_s+1)}^{n} \quad j_{ik}-\mathbb{k}_1$$

$$\sum_{n_i=\boldsymbol{n}+}^{} \sum_{=\boldsymbol{n}+\mathbb{k}-}^{} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{}$$

$$+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i$$

$$\sum_{sa}^{} \sum_{=\boldsymbol{n}-j^{sa}+1)}^{} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}^{}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{k - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{sa}=}^{(n_{ik}+j_{ik}} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}-j_i}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (\quad j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(\quad - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{ik}}+s+\boldsymbol{n}-D-j_{sa}^{ik}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}-j_{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j_{ik}+s-j_{sa} \leq j_i < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l}-j_{sa}-s = \wedge$

$D+j_{sa}^{ik}-\boldsymbol{n} < \boldsymbol{l_{ik}} \leq D+j_{sa}^{ik}-\boldsymbol{n}-\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k}$

$\mathbb{k}_z: z = \wedge \mathbb{k} = \mathbb{k}_1+ \Rightarrow$

$$fz S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l}-j_{ik}-\boldsymbol{l}-1)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - \quad)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\quad \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - \quad - \boldsymbol{l} + 1)! \cdot (\quad - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa} + 1)!}{(j_s + \boldsymbol{l_{ik}} - \quad)! \cdot (j_{ik} - \quad - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \quad \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j^{sa} + j_s^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{ik}} + \boldsymbol{n} + j_{sa} - D - j_{sa}^{ik})}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \quad_{\boldsymbol{i}} \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

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$$1 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \le D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$$

$$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_s,\ldots,j_{sa},j_i} = \sum_{k=\boldsymbol{l}}^{j_{ik}-j_{sa}^{ik}+1} \sum_{(j_s=2)}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{j_{ik}=\boldsymbol{n}-D}^{(\quad)} \left(j^{sa}-\quad+j_{sa}-j_{sa}^{ik}\right) \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_s}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\ldots}^{n} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}\ldots+1)}^{\ldots-j_s+\ldots} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}\ldots-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\ldots a=\boldsymbol{n}-j^{sa}+1)}^{\ldots k+j_{ik}-j\ldots-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(\ldots - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\ -j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{s}\ )}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j\ \ \mathbb{k}_1-\mathbb{k}\ -j_{sa})!}{(n_i-\ -\mathbb{k}_1-\ )!\cdot(\boldsymbol{n}\ \ -j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{\ -j_s-\ +1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D\ \ j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}\ \ 1 \leq j_{ik} \leq \ ^{a}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+\ -j_{sa}^{ik} \leq j^{s}\ \ j_i+j_{sa}-s \wedge j^{sa}\ \ -j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \ \wedge \boldsymbol{l_{sa}}+\ ^{ik}-j_{sa}\ \ \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+\ ^{ik}-\boldsymbol{n} < \boldsymbol{l_{ik}} \leq \ +\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < \ \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq \ ^{i}-1 \wedge j_{sa}\ \ j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s},\cdots,\ \ j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\} \wedge$

$\ \geq 4 \wedge \ \ s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik})}$$

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$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{i}-n_{ik}-\mathbb{k}_{}+1)!}{(j_{ik}-j_s-1)!\cdot(}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(}$$

$$\frac{}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{\left(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1\right)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l}-j_{ik}-\boldsymbol{l_{ik}})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\ \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}}$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ \ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}}\sum_{(j^{sa}=j_i+j_{sa}-s)}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{\boldsymbol{i}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq \ _{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}} \sum_{(j_{ik}+j_{sa}-j_{sa})}^{(j_{ik}+j_{sa}-j_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}^{j^{sa},j_i} \sum_{j_s=2}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{is}+j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{\left(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}\right)!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )}\sum_{(j^{sa}=j_{i}+j_{sa}-j_{sa}^{}}^{}\sum_{}^{}{}^{}{}_{}{}^{}{}_{}{}^{}{}_

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_i}+j_{sa}^{ik}-\boldsymbol{l}-s+1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ \ )} \sum_{j_i=}^{a}{}^{+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-}^{n_{is}+j_s-\mathbb{k}_1}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j} \sum_{-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(-j_s-1)!\cdot(+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{s}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -
$$

$$
\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}
$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=} \sum_{+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1 \quad -j_s)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2) \quad (\boldsymbol{n}+j^{sa} \quad -j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l}_s-\boldsymbol{l}-1)!}{-\boldsymbol{l}+)! \cdot (j_s-2)!}$$

$$\frac{(D}{(D+ -\boldsymbol{n}-\boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq \quad -1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_{ \quad }-j_{sa}^{ik}-1 \leq j_{ik} \quad j^{sa}+j_{sa} \quad -j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa} \quad s \wedge j^{sa}+s \quad j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - \quad ^{ik}+1 > \boldsymbol{l_s} \quad +j_{sa}^{ik}-j_{sa} \quad \wedge \quad +j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \quad j_{sa}-\boldsymbol{n} \quad \leq D \quad +j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} \quad 0 \wedge$

$j_{sa} \leq j_{sa} \quad 1 \wedge j_{sa}^{ik}=j_s \quad -1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s} \cdots, \mathbb{k}_1, \quad \mathbb{k} \quad , \cdots, j_{sa}^{i}\} \wedge$

$s \quad 4 \wedge s \quad s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \quad \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_i=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_2-1)!}{(j_{ik}-j_s-1)!\cdot(n_i+j_s-n_{is}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{sa}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l}_$$

$$(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{$ $\leq j^{sa}+j_{sa}^{i}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s$ $j^{sa}+s-j_{s}$ $\leq j_i \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=$ $\wedge \boldsymbol{l_i}+j_{sa}-s$ $\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1$ $j_{sa}^{s} < j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}$ $, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} =$ $+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2 =$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{-1)!}{(n_s + - \boldsymbol{n} - 1) - j_i)!} \cdot$$

$$\frac{(- \boldsymbol{l} - 1)!}{- j_s - \boldsymbol{l} - 1)! \cdot (j_s - 2)!}$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} +}{(j_s + \boldsymbol{l_{ik}} - \boldsymbol{l_s}) (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz_{j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\boldsymbol{l_{sa}}+\cdots-\boldsymbol{l}-j_{sa}+\cdots \sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+\cdots-D-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\boldsymbol{l_{ik}}=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{j_{is}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(j_s+1)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D > \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}^{ik}-\boldsymbol{n} < \boldsymbol{l_{ik}} \leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1 \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{\boldsymbol{l}_{\boldsymbol{s}}} \sum_{j_s=2)}^{(\boldsymbol{l}_{\boldsymbol{s}}-\boldsymbol{l}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_i+j_{sa}-s)}^{(\ )} \sum_{j_i+\boldsymbol{n}+s-D-j_{sa}^{ik}}^{\boldsymbol{l}_{\boldsymbol{ik}}+s-\ \ 1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\ }^{n} \sum_{s=\boldsymbol{n}+\mathbb{k}-\ 1)}^{-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{sa=\boldsymbol{n}-j^{sa}+1)}^{+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{\ \ - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l}_{\boldsymbol{s}} - \boldsymbol{l} - 1)!}{(\boldsymbol{l}_{\boldsymbol{s}} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l}_{\boldsymbol{ik}} - \boldsymbol{l}_{\boldsymbol{s}} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l}_{\boldsymbol{ik}} - j_{ik} - \boldsymbol{l}_{\boldsymbol{s}})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l}_{\boldsymbol{i}})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l}_{\boldsymbol{i}})! \cdot (\boldsymbol{n} - j_i)!} -
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)} \sum_{j_i=\boldsymbol{l_{ik}}+s+\boldsymbol{n}-D-}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \sum_{n_s=n_{sa}+j^{s}}$$

$$\frac{(n_i+j_{sa}-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-n-\mathbb{k}_1-\mathbb{k}_2)!\cdot(n_{sa}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \geq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq \boldsymbol{l_s} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \leq j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} \geq j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{ik}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D - \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \geq 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\left\{j_{sa}^{s}, \cdots, j_{sa}^{ik} - 1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}+1)}^{(n_{ik}+j_{ik}-j_{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{is}+j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_{sa}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-1)!\cdot(\quad-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _i\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq \ _i\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq \quad \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+\quad -j_{sa} \leq j_i \leq \quad \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+\quad -j_{sa} = \boldsymbol{l_{ik}}-\boldsymbol{l_i}+j_{sa} \quad \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}^{ik}-\boldsymbol{n} < \boldsymbol{l_{ik}} \leq D+\boldsymbol{l_s}+\quad -\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \quad > 0 \wedge$

$j_{sa}^{i} \leq j_{sa}^{i}-\quad j_{sa}^{ik} = j_{sa}^{s}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \quad j_{sa}, \cdots, \quad\}$

$s > 4 \wedge \quad = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \quad = \mathbb{k}_1+\quad \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_i-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\boldsymbol{n}+j_i-n_s-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s-\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} <$ $_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{sa} + 1)}^{(j_i + j_{sa} - s)} \sum_{j_i = s + 1}^{\boldsymbol{l_{ik}} + j_{sa}^{ik} - \boldsymbol{l} - s + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\,(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\quad+j_{sa}^{ik}-\quad-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-\quad)!\cdot(j_i+\quad-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}-\quad)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\quad)}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i=\boldsymbol{l_{ik}}+j_{sa}^{ik}-\boldsymbol{l}-s+2}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\right.}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{}^{(\ )}\sum_{j_{sa}^{ik}+1)}^{}$$

$$\boldsymbol{l_{ik}}+j_{sa}^{ik}-\boldsymbol{l}-s+1$$

$$\sum_{j^{sa}+j_{sa}^{ik}-j_{sa}}^{}\ (\ )\sum_{j_i+j_{sa}-s)}^{}\ \sum_{j_i=s+1}^{}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-\ \ 1)}\ (n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\boldsymbol{\geq n}\ \ \wedge \boldsymbol{l} \neq\ \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{\boldsymbol{l}=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{i}}^{j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}+1}^{j^{sa}+j_{sa}^{i}} \sum_{(j_i+j_{sa}-s)}^{(j^{sa}+j_{sa}^{ik}+1)} \sum_{j_i=s+1}^{\boldsymbol{n}-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}-j_s+1}^{n} \sum_{=\boldsymbol{n}+\mathbb{k}-j_{}}^{j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{}
$$

$$
\sum_{sa=\boldsymbol{n}-j^{sa}+1)}^{+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{k - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} +}$$

$$\sum_{j_{ik} = j_{sa}^{ik}+1}^{\boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l}} \quad \sum_{(j^{sa} = j_{sa}}^{(\boldsymbol{l_{sa}} - \boldsymbol{l} + 1)} \quad \sum^{-\boldsymbol{l}+1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \quad \sum^{(n_i - j_s +} \quad \sum^{n_{is} + j_s - j_{ik}}$$

$$\sum^{(n_{sa} = \boldsymbol{n} -} \quad \sum_{n_s = \boldsymbol{n} - j_i + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s -)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - _s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j \quad \mathbb{k}_1-j_{sa})!}{(\quad -\mathbb{k}_1 \quad)!\cdot(\quad -j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s \quad +1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D \quad j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \quad + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} \quad 1 \leq j_{ik} \leq \quad a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + \quad - j_{sa}^{ik} \leq j \quad j_i + j_{sa} - s \wedge \quad a \quad - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \quad \wedge \boldsymbol{l_{sa}} \quad ^{ik} - j_{sa} \quad \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \quad < n \wedge I = \mathbb{k} \quad 0 \wedge$

$\quad sa \leq j_{sa}^{i} \quad 1 \wedge j_{sa}^{ik} = j_s \quad - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_s^s \quad \cdots, \mathbb{k}_1, j_{sa} \quad \quad sa, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} \quad s + \mathbb{k} \wedge$

$\quad : z = 2 \quad \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{is}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-\boldsymbol{l}-s+2)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_i-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\boldsymbol{n}+j_i-n_s-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-\boldsymbol{l}-s+1)} \sum_{(j^{sa}=j_{sa}+1)}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l_i}$$

$$(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} +$ $- s > \boldsymbol{l_s} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} -$ $\wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots$ $sa\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s\ , j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad \boldsymbol{l}-1)}{(\boldsymbol{l_s}-\quad -\boldsymbol{l}+1)\quad -2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\quad)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}\quad (j^{sa}+j_{s}\quad -j_{ik}-j_{sa})!}$$

$$\frac{(\boldsymbol{l_i}+\quad -\boldsymbol{l_{sa}}-s)}{(j^{sa}+\boldsymbol{l_i}\quad -\boldsymbol{l_{sa}})!\,(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D\quad \boldsymbol{l_i})!}{(D+\quad -\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\right.}$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j}\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

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$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{} \left(j_s = j_{ik} \quad +1\right)$$

$$\sum_{j \quad j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \left(j \quad _{ik} + j_{sa} - j_{sa} \right) \sum^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \quad \sum^{\boldsymbol{l_i}-\boldsymbol{l}+1} \quad +s-j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \left(n_{is} = \quad \mathbb{k} - j_s + 1\right) \sum^{(n_i - j_s \quad)} \quad \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n \quad +j_{ik}-j^{sa}-\mathbb{k}_2)} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

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$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-}^{(\ )} \sum_{}^{} \quad -j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(}^{(n_i-j_s+1)} \sum_{n_{ik}=}^{} \quad +j_s-j_{ik}-\mathbb{k}_1$$

$$\sum_{(n_{sa}=}^{} \sum_{+j_{ik}-j^{sa}}^{} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{}$$

$$\frac{(n_i + j^{sa} - j_{} - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \quad - \mathbb{k}_1 - \mathbb{k}_{} \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \quad \boldsymbol{l} \wedge \boldsymbol{l_i} \quad D + s \quad \wedge$

$1 \leq j \leq j_{ik} - j_{sa}^{ik} + \quad j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \quad ^{ik} \leq j^{sa} \leq \quad + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - \quad + 1 = \boldsymbol{l_s} - \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \quad \boldsymbol{l} = \mathbb{k} > 0 \wedge$

$\quad < j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}\ \ -j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}\ \ +1)}^{(n_{ik}+j_{ik}-\ \ )} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}\ \ -j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - \ \ j_s + 1)!} \cdot
$$

$$
\frac{(\ \ - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(\ \ - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1 \quad -j_s)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)\ (\boldsymbol{n}+j^{sa}-j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s}\ \boldsymbol{l}-1)!}{-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D-}{(D+\ \boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j^{ik}\ \leq j_{ik} \leq\ _a+j_{sa}^{ik}-j\ \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i\ _{sa}-s \wedge j^{sa}\ -j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}\ > \boldsymbol{l_{ik}} \wedge \boldsymbol{l}\ j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq n < n \wedge I=\ \ 0 \wedge$

$j_s \leq j_{sa}^{i}-1\ _a^{ik}=j_{sa}\ \ 1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{\ \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2\ _a, \cdots, j_{sa}$

$> 4 \wedge\ \ s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}\ \ _2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_i-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\boldsymbol{n}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D -}{(D + j_i - \boldsymbol{n} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa}$ $\boldsymbol{ik} \wedge \boldsymbol{l_i} +$ $- s >$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} -$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots$ $sa\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad \boldsymbol{l}-1)}{(\boldsymbol{l_s}-\quad -\boldsymbol{l}+1)\quad -2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\quad)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\quad (j^{sa}+j_{s}-j_{ik}-j_{sa})!}$$

$$\frac{(\boldsymbol{l_i}+\quad -\boldsymbol{l_{sa}}-s)}{(j^{sa}+\boldsymbol{l_i}-\quad -\boldsymbol{l_{sa}})!\,(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\quad -\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\;-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\quad)}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S}{}_{j_s, j_{ik}, j^{sa}, j_i} \sum \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{a + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\ + j_{sa} - s)} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_{ik}} + s - \boldsymbol{l} - j_{sa}^{ik} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\right.}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(D-\boldsymbol{l})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{l}-j_i)!}+$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{(\quad)}\ \sum_{(j^{sa}+\boldsymbol{n}-D)}^{\boldsymbol{l_{ik}}-\boldsymbol{l}}\ \sum_{j_i=\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+2}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n_{\quad}}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{\quad}-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-\boldsymbol{l}}^{(\quad)} \sum_{j_s=j_i+j_{sa}-\boldsymbol{l}_{ik}+s}^{(\quad)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{(\quad)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(\quad)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\quad)}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i + \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$\geq \boldsymbol{n} < \quad \wedge \boldsymbol{l} \neq \quad \boldsymbol{l} \wedge \quad \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j \leq j_{ik} - \quad \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \quad \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\quad - j_{sa}^{ik} = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(j_i+j_{sa}-s)} \sum_{\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i+1}^{n_{is}+j_s-n_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(\quad=\boldsymbol{n}-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}} \sum_{\quad-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(- j_s)! \cdot (\quad + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{s} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{}^{n_{ik}-j_{ik}+1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}}^{(n_{ik}+j_{ik}-} \sum_{}^{n_{sa}-j_i}$$

$$\sum_{(n_{sa}=\boldsymbol{n}}^{} \sum_{n_s=\boldsymbol{n}-j_i}^{}$$

$$\frac{(n_{\cdot}-n_{is}-1)!}{(j_s-2)!\cdot(n_i \quad j_s+1)!}\cdot$$

$$\frac{-n_{ik} \quad \mathbb{k}_1-1)!}{j_{ik}-j_s-1)! \quad n_{is}+j_s \quad n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik} \quad n_{sa}-1)!}{(j^{sa} \quad _{ik}-1)! \quad n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)}$$

$$\frac{(\boldsymbol{l}-1)!}{\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D}{(D+\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq$ $+j_{sa}^{ik}-j$ $\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i$ $_{sa}-s \wedge j^{sa}$ $-j_{sa}-j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}$ $_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l}$ $j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq$ $+\boldsymbol{l_s}+s-\boldsymbol{n}$ $\wedge$

D $\boldsymbol{n} < n \wedge$ $= \mathbb{k} >$

j_{sa} $< j_{sa}^{i}-1 \wedge j_{sa}^{i}$ $j_{sa}-1$ $< j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s},$ $\mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}$ $\cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} =$ $\mathbb{k} \wedge$

$\mathbb{k}_2$ $= \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(\boldsymbol{l_{sa}}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-\boldsymbol{l}-j_{sa}^{ik}+2)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(\boldsymbol{n} - 1)!}{(n_s + \boldsymbol{n} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j_{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s)}^{(\boldsymbol{l_{ik}} + j_{sa} - \boldsymbol{l} - j_{sa}^{ik} + 1)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j_{sa},j_i}=\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-_{k}-j_{sa}\right)!}$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-$$
$$\frac{}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})\cdot(j_i+j_{sa}-$$

$$\frac{(\boldsymbol{l}-\boldsymbol{l_i})!}{-\boldsymbol{n}-\boldsymbol{l}\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{=j_{sa}^{ik}+1}^{j_{sa}^{ik}-j_{sa}}\ \sum_{+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-\quad)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\boldsymbol{l}=\quad}^{\quad}\sum_{(j_s=j_{ik}-j_{sa}^{ik}}^{\quad}$$

$$\sum_{j_{ik}=\quad+1}^{\boldsymbol{l_s}+j_{sa}^{ik}}\ \sum_{(j^{sa}=\quad-j_{sa}-\boldsymbol{l}+1)}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\quad}$$

$$\sum_{\quad=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\quad-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{\quad+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - \boldsymbol{l_{sa}} - j^{sa} - j_{sa}}^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum$$

$$\sum_{n_i = \boldsymbol{n} + \Bbbk}^{n} \sum_{(n_{ik} = \boldsymbol{n} + \Bbbk + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + j_s - j_{ik} - \Bbbk_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + j_{ik} - j^{sa} - 1)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \Bbbk_1 - \Bbbk_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \Bbbk_1 - \Bbbk_2) \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \leq j_i \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} - \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} - \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$\boldsymbol{n} \geq \boldsymbol{n} - 1 \wedge I = \Bbbk > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \quad \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \quad \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \quad \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \quad \sum_{+\mathbb{k}_2}^{n_{is}+\cdots-j_{ik}-\mathbb{k}_1} \quad \sum_{j_{ik}+1}^{\cdots}
$$

$$
(n_{ik}+\cdots-j^{sa}-\mathbb{k}_2)\ n_{sa}+\cdots\ j_i
$$

$$
\sum_{\cdots-j^{sa}+\cdots}^{\cdots} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}^{\cdots}
$$

$$
\frac{(n_i - n_{is}}{\cdots(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-\cdots-\mathbb{k}_1-1)!}{(j_{ik}-\cdots-j_s-1)!\cdot(n_{\cdots}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{\cdots}-n_{sa}-1)!}{(\cdots-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{\cdots_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2}$$

$$\frac{(n_{i}-n_{ik}-\mathbb{k}_{}$$

$$\frac{(n_{ik}-n_{sa}-1)}{(j^{sa}-j_{ik}-1)!\cdot(}$$

$$\frac{}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{}$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1}{(\boldsymbol{l_s}-j_s-1)!\cdot(-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}-j_{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j_{ik}+s-j_{sa} \leq j_i < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_{ik}}+j_{sa}-s > \boldsymbol{l_i} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa} \leq j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{s}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s}=s+\mathbb{k}$

$\mathbb{k}_z: z \in \mathbb{N} \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ \ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(\boldsymbol{l_{sa}} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l}_s - 1)!}{(n_s + \boldsymbol{l}_s - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l}_s - \boldsymbol{l} - 1)!}{(\boldsymbol{l}_s - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l}_{sa} + j_{sa}^{ik} - \boldsymbol{l}_{ik} - j_{sa})!}{(j_{ik} + \boldsymbol{l}_{sa} - j^{sa} - \boldsymbol{l}_{ik})! \cdot (j_{sa}^{ik} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l}_i + j_{sa} - \boldsymbol{l}_{sa} - s)!}{(j_{ik} + \boldsymbol{l}_i - j_i - \boldsymbol{l}_{sa})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l}_i)!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l}_i)! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = \boldsymbol{l}_i + \boldsymbol{n} + j_{sa}^{ik} - D - s}^{\boldsymbol{l}_s + j_{sa}^{ik} - \boldsymbol{l}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l}_s - \boldsymbol{l} - 1)!}{(\boldsymbol{l}_s - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s,\ldots,j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\right.}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(D-\boldsymbol{l}-)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(-j_i)!}+$$

$$\sum_{k=}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)}\sum_{}^{(D-s+1)}$$

$$\sum_{=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}+1)}\sum_{(j^{sa}+j_{sa}-j_{sa}^{ik})}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(l_{ik}-j_{sa}^{ik}+2)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(j_s=l_i+n-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\quad)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(j_{sa}=j_{ik}+j_{sa}-j_s} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\quad)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(\quad)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_s=\boldsymbol{n}+\mathbb{k}-j_s} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\quad)}$$

$$\sum_{n_{sa}=n_{ik}}^{(\quad)} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(n_{sa}=n_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i + \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$\boldsymbol{n} \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_{ik} \leq j_{ik} - \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - {}^{ik}_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i} - j_{sa}^{ik} = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{\boldsymbol{l_i}=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-n_{ik}-\mathbb{k}_1}
$$

$$
\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j_i=j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=} \sum_{+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1 \quad -j_s)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)\,(\boldsymbol{n}+j^{sa} \quad j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l}-1)!}{-\boldsymbol{l}+)!\cdot(j_s-2)!}$$

$$\frac{(D}{(D+ -\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq \quad -1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_{ \quad }-j_{sa}^{ik}-1 \leq j_{ik} \quad j^{sa}+j_{sa}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa} \quad s \wedge j^{sa}+s \quad j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} \quad ^{ik}+1=\boldsymbol{l_s} \quad _a+j_{sa}^{ik}-j_{sa} \quad _k \wedge \quad +j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D \quad s-\boldsymbol{n}< \quad \leq D+\boldsymbol{l} \quad s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I= \quad 0 \wedge$

$j_{ \quad } \leq j_{sa} \quad 1 \wedge j_{sa}^{ik}=j_s \quad -1 \wedge j_{sa}^{s}<j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s} \cdots, \mathbb{k}_1, \quad \mathbb{k}_2, \cdots, j_{sa}^{i}\} \wedge$

$s \quad 4 \wedge s \quad s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \quad \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}}{(j_{ik}-j_s-1)}$$

$$\frac{(n_{ik}-n_{sa}-1)}{(j^{sa}-j_{ik}-1)!\cdot(}$$

$$\frac{a}{(j_i-j^{sa}-1)}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_{ik}}+s-\boldsymbol{l}-j_{sa}^{ik}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}-1)!\cdot(\boldsymbol{l}-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{l}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{sa} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}-j_{sa} > \boldsymbol{l_{ik}}-\boldsymbol{l_i}+j_{sa} \leq \boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \boldsymbol{n} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, j_{sa}, \cdots, j_{sa}\}$

$s > 4 \wedge \boldsymbol{n} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \boldsymbol{n} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(\boldsymbol{n} + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_}$$

$$(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{i}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq {}_{i}\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{} \leq j^{sa}+j_{sa}^{i}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{s} \leq j_i \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \wedge \boldsymbol{l_i}+j_{sa}-s \leq \boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = + \mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k} = + \mathbb{k}_2 =$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l}-j_{sa}^{ik}+2)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{sa} + j_i - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\boldsymbol{l_{sa}} + j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik} + 2)} \sum_{(j_s = \boldsymbol{l_i} + \boldsymbol{n} - D - s + 1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < {}^{ik}_{a} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=j_{sa}+1)}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}-1)!\cdot(j_{ik}-j_s-\quad+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-\quad)!\cdot(j_i+\quad-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}\quad)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{k=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\sum_{(j^{sa}=j_{sa}+1)}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}-j_{sa}}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=s+1}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-\boldsymbol{n}-1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\boldsymbol{n}\geq\boldsymbol{n}<\boldsymbol{n}\wedge\boldsymbol{l}\neq{}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_i=j^{sa}+}
$$

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$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\sum_{j_{ik}=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}+1}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}+1)}^{(n_{ik}+j_{ik}-\mathbb{k}_2)}\sum_{\boldsymbol{n}=j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{ik}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j_{sa}-\boldsymbol{n}-\mathbb{k}_1-\boldsymbol{l_i}-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \leq 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_i} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{i}, \cdots, j_{sa}^{i}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-}^{\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} - 1)!} \cdot$$

$$\frac{(n_{ik} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(\boldsymbol{n} + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s - \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\ (\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} <$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_s} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik} -$ $\wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots$ $sa\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$ $+\mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad \boldsymbol{l}-1)}{(\boldsymbol{l_s}-\quad -\boldsymbol{l}+1)\quad -2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}+1)!}{(j_s+\boldsymbol{l_{ik}}-\quad)!\cdot(j_{ik}-\quad -j_{sa}^{ik}+1)!}$$

$$\frac{(\boldsymbol{l_i}+\quad -\boldsymbol{l_{sa}}-}{(j^{sa}+\boldsymbol{l_i}\quad -\boldsymbol{l_{sa}})!\,(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D\quad \boldsymbol{l_i})!}{(D+\quad -\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ \ )}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

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$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$$

$$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_{2\cdots,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{} \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}-j_i} \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\right)}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(\boldsymbol{l}-\boldsymbol{l})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\quad-j_i)!}+$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-\quad+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+}\ \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}\ \sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\quad-\boldsymbol{l}+1)}\ \sum_{j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\boldsymbol{l}}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\ldots}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ )}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i+\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<\ldots\wedge\boldsymbol{l}\neq\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\ldots\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}-1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{=\boldsymbol{l_i}+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-}^{n_{is}+j_s-} \sum_{-\mathbb{k}_1}^{-1}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-n_{sa})\ n_{sa}+j^{sa}-j_i} \sum_{-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(n_{is} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}}^{(n_{ik}+j_{ik}-} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (\quad j_s + 1)!} \cdot$$

$$\frac{- n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)!\cdot(n_i-n_{is}}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_}{(j_{ik}-j_s-1)!\cdot(}$$

$$\frac{(n_{ik}-n_{sa}-1)}{(j^{sa}-j_{ik}-1)!\cdot(}$$

$$\frac{}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-1)!\cdot(\boldsymbol{l}-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j_{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_{ik}}+j_{sa}-s > \boldsymbol{l_s} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa} = j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k}$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l} - j_{ik} - \boldsymbol{l} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{-1)!}{(n_s + - \boldsymbol{n} - 1) - j_i)!} \cdot$$

$$\frac{(\boldsymbol{-l} - 1)!}{- j_s - \boldsymbol{l} - 1)! \cdot (j_s - 2)!}$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} +}{(j_s + \boldsymbol{l_{ik}} - \boldsymbol{l_s}) (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} - \boldsymbol{l_{sa}} - s)!}{(+ \boldsymbol{l_i} - j_i - \boldsymbol{l_s}! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s} - \boldsymbol{l} + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{l} + 1}^{\boldsymbol{l_{ik}} - \boldsymbol{l} + 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa}}^{\boldsymbol{l_i} - \boldsymbol{l} + 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}-1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}-$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-$$

$$\frac{(D-\boldsymbol{l_i})}{(D+j_i-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+}^{j_{sa}^{ik}-\boldsymbol{l}}\sum_{j_{sa}^{ik}-D-s}^{(\ )}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

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$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s, \ldots, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=2)} $$

$$ \sum_{\ldots=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j\ldots+j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ldots)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1} $$

$$ \sum_{\ldots_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ldots_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot $$

$$ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum$$

$$\sum_{j_{ik}=j_s}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{sa}-j_{sa}^{ik})}^{(\quad)} \sum_{j_i=j_s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}}^{(n_i-j_s+1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{k+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

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$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )}\sum_{(j^{sa}=j_{ik}+j_{sa}}\sum_{=j^{s}-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(\ +1)\ n_{ik}}^{(n_i-j_s+1}\sum_{+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}}^{(\ )}\sum_{+j_{ik}-j^{s}}\sum_{)\ n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-\ -\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\ -\mathbb{k}_1-\mathbb{k}\ )!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\ \ \boldsymbol{l}\wedge\boldsymbol{l_s}\ \ D-\boldsymbol{n}\ \ \wedge$

$D+\ \ +s-\boldsymbol{n}-\boldsymbol{l_i}\ \ \leq\boldsymbol{l}\leq\ \ \boldsymbol{l}-1\wedge$

$1\leq j_s\leq j\ \ -j_{sa}^{ik}+1\wedge\ \ +j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+\ \ -j_{sa}^{ik}\leq j\ \ \leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+\ \ >\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$+s-\ \ <\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-n_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{n_{sa}+j^{sa}-j_i} \sum_{=\boldsymbol{n}-j^{sa}+1}^{-j_i+1}
$$

$$
\frac{(n_{is}-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(n_{ik}-j_s-1)!\cdot(n_{ik}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -
$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+}^{} \sum_{-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \sum_{k_2)} \sum_{n_s=n_{sa}+j^{sa}}^{}$$

$$\frac{(n_i+j \quad \mathbb{k}_1-\quad -j_{sa})!}{(\quad -n_i-\mathbb{k}_1-\quad)!\cdot(\quad -j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D \quad j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \geq 0 + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq \quad a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + \quad - j_{sa}^{ik} \leq j^{ \quad} < j_i + j_{sa} - s \wedge \quad a \quad - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \quad \wedge \boldsymbol{l_{sa}} + \quad ^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \quad < n \wedge I = \mathbb{k} \quad 0 \wedge$

$\quad sa \leq j_{sa}^{i} \quad 1 \wedge j_{sa}^{ik} = j_s \quad - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_s^s \quad \cdots, \mathbb{k}_1, j_{sa} \quad \quad sa, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} \quad s + \mathbb{k} \wedge$

$\quad : z = 2 \quad \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=s+1}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-} \sum_{=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - 1)}{(j_s - 2)\ (n_i - n_{is}\ + 1)!} \cdot$$

$$\frac{(n_{i} - n_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - j_s - 1)\ (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a} - n_s - 1)!}{(j_i - j^{sa} - 1)\ (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_i-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\boldsymbol{n}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=s+1}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D -}{(D + j_i - \boldsymbol{n} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} \geq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} +$ $- s = \boldsymbol{l_s} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} -$ $\wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots$ $sa\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad\boldsymbol{l}-1)}{(\boldsymbol{l_s}-\quad-\boldsymbol{l}+1)\quad-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}+1)!}{(j_s+\boldsymbol{l_{ik}}-\quad)!\cdot(j_{ik}-\quad-j_{sa}^{ik}+1)!}$$

$$\frac{+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{s}\quad\boldsymbol{l_{ik}})!\cdot(\quad+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\quad-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{\cdot}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}\sum_{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}-}\sum_{(j^{sa}=j_{sa}+1)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{m}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

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$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_s\ ,j_{ik}\ ,j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j\ \ j_{sa}^{ik}+1)} (j_s$$

$$\sum_{j\ \ _{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum^{s-j_{sa}} (j^{\ \ }{}_{+j_{sa}-j_{sa}})$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum^{(n_i-j_s} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} (n_{is}=\ \ \mathbb{k}-j_s+1)$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{(\ \ +j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{} j^{sa}-j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{=\boldsymbol{n}} (n_i-j_s+ \sum_{} n_{is}+j_s-j_{ik}$$

$$\sum_{} \sum_{} +1)\, n_{ik} \sum_{} +\mathbb{k}_2-j_{ik}+1$$

$$\sum_{} \sum_{} (+j_{ik}-j^{sa}-\mathbb{k}_2 \sum_{} j^{sa}-j_i$$

$$\sum_{(n_{sa}=\boldsymbol{n}-} \sum_{+1)} \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s -)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - _s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\ -j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{s}\ )}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j\ \ -\mathbb{k}_1-\mathbb{k}\ -j_{sa})!}{(n_i-\ -\mathbb{k}_1-\ )!\cdot(\boldsymbol{n}\ \ -j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\ +1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D\ \ j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq \ + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \ 1 \leq j_{ik} \leq \ ^{a} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + \ - j_{sa}^{ik} \leq j^{s} \ j_i + j_{sa} - s \wedge \ - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \ \wedge \boldsymbol{l_{sa}} + \ ^{ik} - j_{sa} \ \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \ < n \wedge I = \mathbb{k} \ 0 \wedge$

$j_{sa} \leq j_{sa}^{i} \ 1 \wedge j_{sa}^{ik} = j_{s} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{s}^{s}, \cdots, \mathbb{k}_1, j_{sa}, \ j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} \ + \mathbb{k} \wedge$

$\ z = 2 \ \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-1)!\cdot(\boldsymbol{l}-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{l}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j_{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_s} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa} = j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k}$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l} - j_{ik} - \boldsymbol{l} - 1)! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{-1)!}{(n_s + - \boldsymbol{n} - 1) - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l} - 1)!}{- j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!}$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} +}{(j_s + \boldsymbol{l_{ik}} - \boldsymbol{l_s}) (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_s - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_s} - j^{sa} - \boldsymbol{l_{ik}})! (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\ )} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_s} + s - \boldsymbol{l}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s,\ldots,j^{sa},j_i} = \sum_{\boldsymbol{k}=\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=\boldsymbol{n}-D}^{j^{sa}-j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-j_{sa}} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!} \cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot $$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-}$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(}\cdot$$

$$\frac{(D-}{}+$$

$$\sum_{k=\boldsymbol{l}}^{}\sum_{(j_s=2)}^{}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+}\sum_{=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} +}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{l_{sa}} - D - s)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{\boldsymbol{n}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k}} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \boldsymbol{n} \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \quad \sum \quad (j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+ \quad -D-s)\ j_i=j^{sa}+s
$$

$$
\sum_{n} \quad (n_i-j_s+1) \quad +j_s-j_{ik}-\mathbb{k}_1
$$

$$
+\mathbb{k}\ (n_{is}- \quad -j_s+1)\ n_{ik} \quad +j_{ik}+1
$$

$$
(n_{ik}+ \quad -j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i
$$

$$
\sum_{a=\boldsymbol{n}-j^{sa}+1)} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{\quad -2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} \quad s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)}\ \sum_{j_i}^{sa}+s-j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2}^{n_{is}+j_s-ik-\mathbb{k}_1}+1$$

$$\sum^{(n_{ik}+j_{ik}-\mathbb{k}_2)}\ \sum_{sa=\boldsymbol{n}-}^{n_{sa}+j^{sa}-}\ \sum_{}^{a-j_i+1}$$

$$\frac{(-n_{is}-1)!}{()-2)!\cdot(-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-\mathbb{k}_1-1)!}{(j_{ik}-1)!\cdot(+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-j}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}} {}_2-j_{ik}+1$$

$$(n_{ik}+j_{ik} \quad \mathbb{k}_2)\ n_{s} \quad {}^{sa}-j_i$$

$$\sum_{(n_{sa}=}^{} \quad {}^{sa}+1) \quad n_s=\boldsymbol{n}-j$$

$$\frac{(n_i - n_{} - 1)!}{(j_s - 2)! \cdot (\quad n_{} - j_s + 1)!} \cdot$$

$$\frac{{}_s - n_{ik} \quad \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1) \quad (n_{is} + j_s \quad n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} \quad n_{sa} - 1)!}{(j^{sa} \quad j_{ik} - 1)! \quad n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{ - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\quad)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_s)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(j_{ik}-\boldsymbol{l}+1)!\cdot(j_s-2)!}$$

$$\frac{(D-\boldsymbol{n}-1)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j^{ik}_{sa} \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+j_{sa}-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-1 > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge \mathbb{k} = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j_{sa}^{ik} < j_{sa}^{ik}-1 \wedge$

$\cdots \{j_{sa}^{s}, \cdots \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa} \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s \cdots \mathbb{k} \wedge$

$\mathbb{k}_2 \cdots = \cdots \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\boldsymbol{n}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}-s+1)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)!}{(j_s + j_{ik} - j_{ik} - \boldsymbol{l})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\quad \boldsymbol{l}-1)}{(\boldsymbol{l_s}-\quad -\boldsymbol{l}+1)\quad -2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}+1)!}{(j_s+\boldsymbol{l_{ik}}-\quad)!\cdot(j_{ik}-\quad -j_{sa}^{ik}+1)!}$$

$$\frac{+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{s}-\boldsymbol{l_{ik}})!\cdot(\quad +j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\quad -\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)}\ \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{}\sum$$

$$\sum_{j_{ik}=}^{(}\sum_{+j_{sa}^{ik}-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}\sum_{j_i+j_{sa}-s)\ j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}$$

$$\sum_{}^{m}\sum_{i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _i\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s, j_{ik}, j^{sa}, j_{sa}} = \sum_{\boldsymbol{l}=\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}+1)} $$

$$ \sum_{j_{ik}=\boldsymbol{l_{ik}}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_s}-\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}} $$

$$ \sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{is}-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot $$

$$ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot $$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_{ik}}}\sum_{j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\sum_{j_{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_s}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\boldsymbol{l_i}}^{n}\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{ik}-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_i-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum^{(\boldsymbol{l_s} + j_{sa} - \boldsymbol{l})} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D} \quad - j_{sa}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum^{(n_i - j_s + 1)} \sum_{n_{ik} = \quad - j_{ik} - \mathbb{k}_1}$$

$$\sum^{(} \sum_{(n_{sa} = \quad - j_{ik} - j^{sa} \quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j \quad - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \quad - \mathbb{k}_1 - \mathbb{k} \quad \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \quad \boldsymbol{l} \wedge \boldsymbol{l_s} \leq \quad - \boldsymbol{n} \quad 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \quad \leq j^{sa} \leq \quad + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} \quad + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} \quad \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$\quad \quad \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1} \quad \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \quad \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \quad \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \quad \sum_{n_{is}+\mathbb{k}-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{n_{sa}+j_{ik}+1} \quad \sum_{j_i}
$$

$$
\sum_{\boldsymbol{n}-j^{sa}+1}^{\boldsymbol{n}-j_i+1} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is}}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - j_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{sa} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} - 1)!} \cdot$$

$$\frac{(n_{ik} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_i - n_{is} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\boldsymbol{n}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l}$$

$$(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \ (\boldsymbol{n} - j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa}$ $\boldsymbol{ik} \wedge \boldsymbol{l_i} + j$ $- s = \boldsymbol{l}$ $\wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n}$ $1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} -$ $\wedge j_{sa}^{s} < j_{sa}$ $1 \wedge$

$\boldsymbol{s}$: $\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots,$ $\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s +$ $\wedge$

$\mathbb{k}_{-}: z = 2 \wedge$ $= \mathbb{k}_1 +$ $\Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_s - \boldsymbol{n} - 1)! \cdot (n_s - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(j_s - j_s - \boldsymbol{l} - 1)! \cdot (j_s - 2)!}$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}-1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}-1)!\cdot(j_{ik}-j_s-$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-$$

$$(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}-1)}\sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}}\sum_{s+j_{sa}^{ik}-1}^{(\ )}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

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$$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq {}_{i}\boldsymbol{l} - 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$S_{j_s, j_{ik}, \ldots, j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{j_{ik}=\boldsymbol{l_{ik}}-D}^{(\quad)} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_i}-\boldsymbol{l}+1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}-j_i} \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{\boldsymbol{l}=\boldsymbol{l}} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} - j_{sa}} \sum_{(j_{sa} = j_i + j_{sa} - s)}^{(\ )} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_s} + s - \boldsymbol{l}}$$

$$\sum_{\boldsymbol{n} = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(\ )} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D > \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$D + \boldsymbol{l_s} + s - \boldsymbol{n} - \boldsymbol{l_i} + 1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

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$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$$

$$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \quad \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \quad \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n} \quad \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{(} \quad \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}$$

$$\sum_{a=\boldsymbol{n}-j^{sa}+1)}^{k+j_{ik}-j} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}^{\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(\quad - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_{i}^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s} -\mathbb{k}_1$$

$$\sum_{(n_{sa}=n_i}^{(\ )} \sum_{j_{ik}-j} \sum_{+j^{sa}-j_i}$$

$$\frac{(n_i \quad ^{sa}-j_i \quad _1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1 \quad \mathbb{k}_2)!\cdot(\quad +j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s} \quad j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \quad \boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n} \quad 1 \wedge$

$D+\boldsymbol{l_s}+s \quad -\boldsymbol{l_i}+ \quad \leq \boldsymbol{l} \leq \quad _i\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik} \quad 1 \wedge j_s+ \quad ^{ik} \quad \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa} \quad -j_{sa}^{ik} \leq j^{sa} \leq \quad +j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 \quad \boldsymbol{l_s} \wedge \boldsymbol{l_{ik}}-j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \quad _{sa} \quad \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \quad I = \mathbb{k} > 0 \wedge$

$j_{sa} \quad _{sa}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_{sa}}+s-\boldsymbol{l}-j_{sa}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i-n_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-
$$

$$
\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}
$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \left(j^{sa}=j_i+j_{sa}-s\right) \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \left(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1\right) \sum_{n_{ik}=n_{is}+j_s-j_{ik}}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}^{} {}_{+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1 \quad -j_s)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2) \quad (\boldsymbol{n}+j^{sa} \quad j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l}_{\boldsymbol{j}} \quad \boldsymbol{l}-1)!}{j_s-\boldsymbol{l}+ \quad)! \cdot (j_s-2)!}$$

$$\frac{(D}{(D+ \quad -\boldsymbol{n}-\boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n}$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+ \quad j_{ik} \leq j \quad +j_{sa}^{ik}-j \quad \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i \quad _a-s \wedge j^{sa} \quad -j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik} \quad > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} \quad j_{sa}-s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \quad < n \wedge \boldsymbol{l} \neq \quad \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+ \quad \wedge$

$1 \leq j_s \leq j_{ik}- \quad +1 \wedge j \quad j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik} \quad _a-j_{sa}^{ik} \leq j^{sa} \quad j_i+j_{sa} \quad s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\quad -s+ \quad \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq \quad +s-\boldsymbol{n}$

$D \geq \boldsymbol{n} < \quad \quad l = \mathbb{k} > 0 \wedge$

$\quad < j^i \quad 1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\,,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=s}^{\boldsymbol{l_s}+s-\boldsymbol{l}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}+1)}^{(n_{ik}+j_{ik}-j_{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=\boldsymbol{l_s}+s-\boldsymbol{l}+1}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$(n_{ik}+j_{ik}-\mathbb{k}_2)\; n_{sa}^{\,j^{sa}-j_i}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)!\,(n_{is} + j_s + 1)!}\cdot$$

$$\frac{(n_{is} - n_{ik} + \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)!\,(n_{is} + j_s - n_{ik} - j_{ik} + \mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)!\,(n_{ik} + j_{ik} - n_{sa} - j^{sa})!}\cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)!\cdot(n_{sa} + j^{sa} - n_s - j_i)!}\cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)!\cdot(\boldsymbol{n} - j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)!\cdot(j_s - 2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})!\cdot\left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})!\cdot\left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})!\cdot(j_i + j_{sa} - j^{sa} - s)!}\cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})!\cdot(\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_s}+s-\boldsymbol{l}} \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \sum_{n_s=n_{sa}+j^{s}}$$

$$\frac{(n_i+j \quad \mathbb{k}_1-j_{sa})!}{(n_i-n-\mathbb{k}_1 \quad)!\cdot(n \quad j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s \quad +1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D \quad j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l}_{\boldsymbol{i}} \ D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq \ ^{a}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa}+j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \ \wedge \boldsymbol{l_{sa}}+j \ -j_{sa} \leq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \ < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa}+j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i}-s+1 \ \boldsymbol{l_s} \wedge$

$D \quad -\boldsymbol{n})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=}^{\boldsymbol{l_i}-\boldsymbol{l}+1}{}^{a}{}_{+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-}^{n_{is}+j_s-\mathbb{k}_1}$$

$$\sum_{(\quad=\boldsymbol{n}-j^{sa}+1)}^{+j_{ik}-j^{s}} \sum_{-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+j_{ik}+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+j_{sa}+1}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+j_i+1)}^{(n_{ik}+j_{ik}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_{is}-1)!}{(j_{ik}-2)!\cdot(n_{is}-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-\mathbb{k}_1-1)!}{(j_{ik}-1)!\cdot(n_{ik}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-}^{} \sum_{-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \sum_{\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{s}}^{}$$

$$\frac{(n_i + j \quad \mathbb{k}_1 - \quad - j_{sa})!}{(\quad - n - \mathbb{k}_1 - \quad)! \cdot (n \quad ^{sa} \quad - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s \quad + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D \quad j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l}_{\boldsymbol{i}} \quad D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \quad 1 \leq j_{ik} \leq \quad a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \quad ^{ik} \leq j^{sa} \quad j_i + j_{sa} - s \wedge j \quad s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \quad \wedge \boldsymbol{l_{sa}} + \quad - j_{sa} \quad \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}}) \vee$

$(D \geq \quad < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}} \quad \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \quad j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + \quad - j_{sa}^{ik} \leq j^{sa} \quad \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i} - s + 1 \quad \boldsymbol{l_s} \wedge$

$\quad D \quad - \boldsymbol{n})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-}^{n_{is}+j_s-}
$$

$$
\sum_{(}^{+j_{ik}-j^{sa}} \sum_{=\boldsymbol{n}-j^{sa}+1)}^{) n_{sa}+j^{sa}-j_i} \sum_{}^{\boldsymbol{l}-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum^{(n_i-j_s+1)}\ \sum^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum^{(n_{ik}+j_{ik}-\mathbb{k}_2)}\ \sum^{n_{sa}+j^{sa}}$$

$$\sum\ \sum^{\boldsymbol{n}-j_i+1}$$

$$\frac{-n_{is}-1)!}{(\quad-2)!\cdot(\quad-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-\quad-\mathbb{k}_1-1)!}{(j_{ik}-\quad-1)!\cdot(n\quad+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j\quad-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+ -j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{ }_{ }) }^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j \quad \mathbb{k}_1-\mathbb{k} \quad -j_{sa})!}{(n_i- \quad -\mathbb{k}_1- \quad)!\cdot(\boldsymbol{n} \quad -j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{ -j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D \quad j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _i\boldsymbol{l} \wedge \boldsymbol{l_i} \ D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik} \ \leq j_{ik} \leq \ ^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}- \ ^{ik} \leq j^{sa} \ _i+j_{sa}-s \wedge j \ s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1> \ \wedge \boldsymbol{l_{sa}}+j \ -j_s \ \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}) \vee$

$(D \geq \ \leq n \wedge \boldsymbol{l} \neq \ _i\boldsymbol{l} \ \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik} \ j_{sa}^{ik}+1 \ _s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik} \ _s-j_{sa}^{ik} \leq j \ \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i}-s+1 \ \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \ s-\boldsymbol{n})\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}<j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-}^{n_{is}+j_s-}
$$

$$
\sum_{}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-j_i}^{}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+1}^{} \sum_{}^{-j_i+1}
$$

$$
\frac{(n_{is}-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(n_{ik}-j_s-1)!\cdot(n_{ik}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )}\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\left(n_{is}=\boldsymbol{n}+\mathbb{k}\right)^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s}\sum_{-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_i-j_{ik}-j}^{(\ )}\sum_{+j^{sa}-j_i}$$

$$\frac{(n_i-j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\Big((D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-+1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}-1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}-j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$$

$$D+s-\boldsymbol{n}<\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1)\vee$$

$$(D\geq\boldsymbol{n}\wedge\boldsymbol{l}\neq\ _{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$1\leq j_s\leq j-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$$

$$\boldsymbol{l_i}-s+1>\boldsymbol{l_s}\wedge$$

$$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1)\big)\wedge$$

$$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \quad \sum_{}^{(j_i} \quad \sum_{}^{s-\boldsymbol{l}}
$$

$$
\sum_{}^{(j^{s}} \quad \sum_{}^{+\boldsymbol{n}-D)} \quad \sum_{j_i=\boldsymbol{l_i}+}^{D}
$$

$$
\sum_{}^{n} \quad \sum_{}^{(n_i-j_s+1)} \quad \sum_{}^{+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{}^{+\mathbb{k}} \sum_{}^{(n_{is}} \sum_{}^{-j_s+1)} \sum_{}^{+j_{ik}+1}
$$

$$
\sum_{}^{(n_{ik}+} \sum_{}^{j^{sa}-\mathbb{k}_2)} \sum_{}^{n_{sa}+j^{sa}-j_i}
$$

$$
\sum_{}^{-\boldsymbol{n}-j^{sa}+1)} \sum_{}^{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_i=\boldsymbol{l_s}}^{-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n}\ \sum_{}^{(n_i-j_s}\ \sum_{}^{n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=}^{}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-\ !\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(\ \ -n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(\ -j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )}\sum_{(j^{sa}=j_i+j_{sa}-s}^{\boldsymbol{l_s}+s-}\sum_{=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s}^{}\sum_{-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_i}^{(\ )}\sum_{-j^{ik}-j^{sa}}^{}\sum_{+j^{sa}-j_i}$$

$$\frac{(n_i-\quad^{sa}-j_i-\quad-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\quad\mathbb{k}_2)!\cdot(\quad j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l}\quad_i\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\quad+1 \wedge$

$1\quad j_s \leq j_{ik}-\quad_{sa}^{ik}+1 \wedge\quad+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}\quad j_{sa}-j_{sa}^{ik} \leq j\quad \leq j_i+j_{s}\quad \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}\quad j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} <\quad < D+\boldsymbol{l_s}+s-\boldsymbol{n}-1) \vee$

$(D \geq \boldsymbol{n}\quad \wedge \boldsymbol{l} \neq\quad_i\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j\quad-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i}-s+1 > \boldsymbol{l_s} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}\ (\boldsymbol{l_i}+\boldsymbol{n}+j_s} \sum_{(j^{sa}=}^{-s-1)} \sum_{j_i=\boldsymbol{l_i}+}^{\boldsymbol{l}+1}
$$

$$
\sum_{n}^{(n_i-j_s+1)} \sum_{+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{+\mathbb{k}\ (n_{is}-\mathbb{k}-j_s+1)\ n_{ik}}^{} \sum_{j_{ik}+1}
$$

$$
\sum_{(n_{ik}+j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i}^{} \sum_{}
$$

$$
\sum_{a=\boldsymbol{n}-j^{sa}+1)}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j^{sa}=\boldsymbol{l}+1}^{\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}_1}^{n} \sum_{(n_{is}=\boldsymbol{n}+j_{ik}+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}+1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j_{ik}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_1)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{\boldsymbol{l_s}-\boldsymbol{l}+1}\sum_{(j_s=2)}^{}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}-\boldsymbol{l}+1)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_{}^{sa}+s-j_{sa}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\ j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}\ j_{ik}+1}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=}^{(n_{ik}+j_{ik}}\ \sum_{=\boldsymbol{n}-j_i+1}^{}$$

$$\frac{(n_i-n_{is}-1)!}{(-2)!\cdot(-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-\mathbb{k}_1-1)!}{(j_{ik}-1)!\cdot(+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{-n_{sa}-1)!}{(-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l})} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}+\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-}$$

$$\frac{(n_i + j_{sa} - \mathbb{k}_1 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 -)! \cdot (n_{sa} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s + 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D - j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} < D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \ \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} < \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + \ - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1) \vee$

$(D \geq \boldsymbol{n} < \ \wedge \boldsymbol{l} \neq \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \ \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq \ j_{ik} - j_{sa} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \ \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\ > \boldsymbol{l_s} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1)\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}-D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\boldsymbol{l_i}}^{n} \sum_{(n_{is}=\boldsymbol{n}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j_{sa}+1)}^{n_{ik}+j_{ik}-j_{sa}} \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(j_{ik}-j_{sa}^{ik}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum^{(n_i-j_s+1)}\ \sum^{n_{is}+j_s}$$

$$\sum^{(n_{ik}+j_{ik}-\mathbb{k}_2)}\ \sum$$

$$\sum$$

$$\frac{(n_{is}-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{is}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}+1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+}^{(n_{ik}+j_{ik}-}\ \sum_{}^{n_{sa}+j^{sa}-}$$

$$\sum_{}^{\boldsymbol{n}-j_i+1}$$

$$\frac{-n_{is}-1)!}{-2)!\cdot(-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-\mathbb{k}_1-1)!}{(j_{ik}-1)!\cdot(+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

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$$\sum_{k=\boldsymbol{l}}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{l}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa})}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j_{sa}-\mathbb{k}_1-\mathbb{k}_1-j_{sa})!}{(n_i-\mathbb{k}_1-\mathbb{k}_1)!\cdot(\boldsymbol{n}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\Big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l} \wedge \boldsymbol{l_{sa}}+j_{sa}-j_{sa} \leq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1\Big) \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}} \sum_{(j_s=2)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\ \ -D)}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=\ \ +\boldsymbol{n}-D}^{\boldsymbol{l_i}-\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\ \ }^{n} \sum_{\ \ +\mathbb{k}-j_s+1)}^{(n_i-\ \ )} \sum_{\ \ =\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s\ \ \mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\ \ +1)}^{\ \ +j_{ik}\ \ \ \ +j^{sa}-j_i} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \ \ )! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(\ \ ik - \mathbb{k}_1 - 1)!}{(j_{ik} \ \ j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(\ \ - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)}\ \sum_{j_{\cdot}}^{\boldsymbol{l_i}-\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+}^{n_{is}+j_{\cdot}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+}^{(n_{ik}+j_{ik}-}\ \sum_{}^{-\mathbb{k}_2)\ n_{sa}+j^{sa}-}$$

$$\sum_{}^{\boldsymbol{n}-j_i+1}$$

$$\frac{-n_{is}-1)!}{-2)!\cdot(-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-\mathbb{k}_1-1)!}{(j_{ik}-1)!\cdot(+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(-n_{sa}-1)!}{(-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

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$$\sum_{k=\boldsymbol{l}} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_{sa}}$$

$$\frac{(n_i+j_{ik}-j_{ik}-\mathbb{k}_1-j_{sa}-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(j_{ik}-j^{sa}+j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\big((D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1) \vee$

$(D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} \neq {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$D+\boldsymbol{l_s}+s-\boldsymbol{n}-\boldsymbol{l_i}+1 \leq \boldsymbol{l} \leq {}_{\boldsymbol{i}}\boldsymbol{l}-1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_i}-s+1 > \boldsymbol{l_s} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1)\big) \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)} \sum_{j_s=2)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l}}^{\boldsymbol{l_{ik}}-\boldsymbol{l}+1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{sa}}-\boldsymbol{l}+1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{1}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{a=\boldsymbol{n}-j^{sa}+1)}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{ik}+j_{ik}-j_{}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(\quad - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - \boldsymbol{l} - 1)!}{(\boldsymbol{l_s} - j_s - \boldsymbol{l} + 1)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=\boldsymbol{l}}^{(\boldsymbol{l_s}-\boldsymbol{l}+1)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )}\sum_{(j^{sa}=j_{ik}+j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(\ +1)\ n_{ik}}^{(n_i-j_s+1}\sum_{+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}}^{(\ )}\sum_{+j_{ik}-j^{s}}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j^{sa}-\ -\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\ -\mathbb{k}_1-\mathbb{k}\ )\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l}-1)!}{(\boldsymbol{l_s}-j_s-\boldsymbol{l}+1)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}\ _i\boldsymbol{l}\wedge\boldsymbol{l_i}\ D+s-\ \wedge$

$1\leq\ \leq j_{ik}-j_{sa}^{ik}+\ \wedge j_s+j_{sa}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-\ ^{ik}\leq j^{sa}\leq\ +j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-\ ^{ik}+1=\ \boldsymbol{sa}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<\ \ J=\mathbb{k}>0\wedge$

$<j^i\ -1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\ {}_i\boldsymbol{l}}^{(\ )} \sum_{(j_s=1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=}^{\boldsymbol{l}_i-\ {}_i\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} -j_{ik}+1)
$$

$$
n_{ik}+j_{ik}-j \qquad (\quad -j_i)
$$

$$
n_{sa}=\boldsymbol{n}- +1 \quad (n_s=\boldsymbol{n}-j_i+
$$

$$
\frac{-\mathbb{k}_1 \quad 1)!}{(\quad -2)! \quad -n_{ik} \quad _1+1)!} \cdot
$$

$$
\frac{(n_{ik}- \quad -1)!}{(j^{sa}-j_{ik}- \quad \cdot (n_{ik}+ \quad -n_{sa}-j^{sa})!} \cdot
$$

$$
\frac{(n \quad -n_s-1)!}{(j \quad j^{sa}-1) \quad (n_{sa}+j^{sa}-n_s-j_i)!} \cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(\boldsymbol{l_i}+j_{sa}-j_i-\boldsymbol{l_{sa}})! \cdot (j_i-s)!} \cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!} -
$$

$$
\sum_{k=\ {}_i\boldsymbol{l}}^{(\ )} \sum_{(j_s=1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}
$$

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$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-$$

$D \geq \boldsymbol{n} <\wedge \boldsymbol{l} = \ _i\boldsymbol{l} \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n}$

$\boldsymbol{l_i}-s+1 > \boldsymbol{l_s} \wedge$

$\boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}$ 1 $\wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_s^{i}\}$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\ _i\boldsymbol{l}}^{(\ )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_i}-\ _i\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} -} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_s} - s)!}{(\boldsymbol{l_i} + j_{sa} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i - s)!}$$

$$\frac{(\quad \boldsymbol{l_i})!}{(D + j \quad \boldsymbol{n} - \boldsymbol{l_i})! \quad j_i)!} -$$

$$\sum_{\boldsymbol{l}} \sum_{(j_s=1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\quad)} \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\quad)}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\quad)}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \quad n \wedge \boldsymbol{l} = \quad \boldsymbol{i} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_i \quad j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} \quad j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\ _i\boldsymbol{l}}^{(\ )} \sum_{(j_s=}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}^{\boldsymbol{l}_i-\ _i\boldsymbol{l}+1}
$$

$$
\sum_{\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1} \sum_{+\mathbb{k}-j_{ik}+1)}
$$

$$
\sum_{j_{ik}-j^{sa}-\mathbb{k}_1}^{} \sum_{^{sa}-j_i)}
$$

$$
\sum_{n_{sa}=\boldsymbol{n}-}^{} \sum_{(n_s=\boldsymbol{n}-j_i+1)}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(\quad - 2)! \cdot (\quad - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot (j^{sa} - j_{sa})!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\ _i\boldsymbol{l}}^{(\ )} \sum_{(j_s=1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\ \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}}{(D+s-\boldsymbol{l_i})!(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+$ $\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-$ $\leq j_i-$ $\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-$ $=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge$ $-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \ldots\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z \ldots 2 \wedge \mathbb{k} = \mathbb{k}_1 \ldots \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\ {}_{\boldsymbol{i}}\boldsymbol{l}}\ \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}\ \sum_{(j^{sa}=j_{sa})}^{\left(\boldsymbol{l_{sa}}-\ {}_{\boldsymbol{i}}\boldsymbol{l}+1\right)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\ \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_s+j^{sa}-j_i)}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s -$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)!}$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik}\right.$$

$$\frac{(D$$

$$\sum_{k=}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$$> \boldsymbol{n} \wedge \boldsymbol{l} = \quad \boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=} \sum_{(j_s=1)}^{(\ \ )}
$$

$$
\sum_{j_{ik}=j} \sum_{(j^{sa}=j_i} \sum_{j_i=s}^{(\ \ )}
$$

$$
\sum_{n_i=} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{n}
$$

$$
\sum_{sa=\boldsymbol{n}-j^{sa}+1} \sum_{(n_s=\boldsymbol{n}-j_i+1)}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\ _{i}\boldsymbol{l}} \sum_{(j_s=1)}^{(\ \ )}
$$

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$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )}\sum_{(j^{sa}=j_{sa})}\sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l}=\ {}_{\boldsymbol{i}}\boldsymbol{l}\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_s-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+j_s-j_{sa}\leq j_i\leq\ \wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_s^{ik}-j_{sa}\ \wedge\boldsymbol{l_i}+\ -s=\boldsymbol{a}\wedge$$

$$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$$

$$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_s\leq j_{sa}^{ik}-1$$

$$\boldsymbol{s}:\left\{j_{sa}^{s}\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,\ ,\cdots,j_{sa}^{i}\right\}\wedge$$

$$s>4\wedge\boldsymbol{s}=s+\ \wedge$$

$$\mathbb{k}_z:z\ 2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$$

$$fz^{S_{j_s\ ,j_{ik},j^{sa},j_i}}=\sum_{k=\ {}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ )}\sum_{(j_s=1)}^{\left(\boldsymbol{l_{sa}}-\ {}_{\boldsymbol{i}}\boldsymbol{l}+1\right)}\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{sa})}\sum_{j_i=j^{sa}+s-j_{sa}}^{n}\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)}\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}$$

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$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - \quad)!}{(n_s + j_i \quad \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} \quad)!} \cdot$$

$$\frac{(\boldsymbol{l}_{\boldsymbol{s}} - \boldsymbol{l}_{\boldsymbol{s}} - \quad + 1)!}{(\boldsymbol{l}_{\boldsymbol{ik}} \quad - \boldsymbol{l}_{\boldsymbol{s}} \quad - 1)! \quad - j_{sa}^{ik})!} \cdot$$

$$\frac{(D - \boldsymbol{l}_{\boldsymbol{i}})!}{(\quad + j_i - \boldsymbol{n} \quad \boldsymbol{l}_{\boldsymbol{i}})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\ _{\boldsymbol{i}}\boldsymbol{l}} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l}_{\boldsymbol{i}})!}{(D + s - \boldsymbol{n} - \boldsymbol{l}_{\boldsymbol{i}})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l}_{\boldsymbol{i}} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik}\ \ldots\ j_i} = \sum_{k=\ _i\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=1)}^{(\ \ )}$$

$$\sum_{j_{ik}=j_{sa}}^{\boldsymbol{l_{ik}}-\ _i\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\ _i\boldsymbol{l}}^{(\ )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-\ -\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{s}} \sum_{(n_s=n_{sa}+j^{sa}}^{(\ )}$$

$$\frac{(n_i+j \quad \mathbb{k}_1-\ -j_{sa})!}{(\ -\ -\mathbb{k}_1-\ )!\cdot(\ -j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s\ \boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _i\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s \ _{sa}^{ik} - 1 \leq \ \leq j^{sa} \ ^{ik} \ _{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j \ - s \wedge j^{sa} + \ - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \ \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} \ \boldsymbol{l_{ik}} \wedge \ - j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \ = \mathbb{k} > \ \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_s \ = j_{sa} - \ \wedge j_s^s \ j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s} \ , \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa} \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = \ + \mathbb{k} \wedge$

$\mathbb{k}_z \ \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\ _i\boldsymbol{l}}^{(\ )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{\left(\boldsymbol{l_{sa}}-\ _i\boldsymbol{l}+1\right)} \sum_{j_i=s}^{\boldsymbol{l_i}-\ _i\boldsymbol{l}+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\ \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-\boldsymbol{n}+j_i-1)!}{(n_s+j_i-\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_i-\boldsymbol{l_{sa}}-s)!}{(\boldsymbol{l_i}+j_{sa}-j^{sa}-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\ \boldsymbol{i}}^{(\ )}\ \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )}\ \sum_{(j^{sa}=j_{sa})}\ \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )}\ \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j_{\dots, j_{ik}, j^{sa}, \dots} = \sum_{k=\ {}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ \ )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa})}^{\left(\boldsymbol{l_{sa}}-\ {}_{\boldsymbol{i}}\boldsymbol{l}+1\right)} \sum_{j_i=s}^{\boldsymbol{l_i}-\ {}_{\boldsymbol{i}}\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{k=1}^{\infty} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}$$

$$\sum_{n_i=n_{sa}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i + \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \boldsymbol{l} \wedge \boldsymbol{l_i} \leq \boldsymbol{l_i} + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} + j_{sa} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\ {}_i\boldsymbol{l}}^{(\ )} \sum_{(j_s=1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_{ik}}-\ {}_i\boldsymbol{l}+1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-}^{\boldsymbol{l_i}-\ {}_i\boldsymbol{l}+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} -j_{ik}+1)
$$

$$
\sum_{n_{sa}=\boldsymbol{n}-}^{n_{ik}+j_{ik}-j} +1 \sum_{(n_s=\boldsymbol{n}-j_i+}^{(n_{sa}+} {}^{sa}-j_i)
$$

$$
\frac{\boldsymbol{n}_i - \mathbb{k}_1 - 1)!}{(\ - 2)! \cdot - n_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{ik} - - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=\ {}_i\boldsymbol{l}}^{(\ )} \sum_{(j_s=1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}
$$

GÜLDÜNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\ \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(n_i+j^{sa}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j^{sa}-j_i-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}}{(D+s-\boldsymbol{l_i})!\,(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+$ $\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-$ $\leq j_i-$ $\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-$ $= \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge$ $-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \right.$ $\left.\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z$ $2 \wedge \mathbb{k} = \mathbb{k}_1$ $\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,\,j_{ik},j^{sa},j_i} = \sum_{k=\ {}_{\boldsymbol{i}}\boldsymbol{l}}^{(\ )}\ \sum_{(j_s=1)}^{\boldsymbol{l_{ik}}-\ {}_{\boldsymbol{i}}\boldsymbol{l}+1}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_{ik}}-\ {}_{\boldsymbol{i}}\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\ \sum_{j_i=s}^{\boldsymbol{l_i}-\ {}_{\boldsymbol{i}}\boldsymbol{l}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\ \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - \quad)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - j_s^{ik} + 1\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s} + 1)! \cdot (j_{sa}^{ik})!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - \quad\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \quad)! \cdot (j^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \quad - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=\ \boldsymbol{il}} \sum_{(j_s=1)}^{(\ \ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ \ )} \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ \ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ \ )}$$

$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ _{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

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$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$f_z S_{j_s, j_{ik}, j^{sa}, j_t} \sum_{k=i}^{(\ )} \sum_{(=1)}$$

$$\sum_{\boldsymbol{l_{ik}} - \ _i\boldsymbol{l}+} \sum_{(\boldsymbol{l_{sa}} - \ _i\boldsymbol{l}+1)} \sum_{s-j_{sa}}$$

$$\sum_{j_{sa}^{ik}} (j^{sa} \quad +j_{sa}-j_{sa}^{ik})$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_{ik}-\mathbb{k}_1+1)} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{-j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(\boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s} + 1)! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=\ {}_{i}\boldsymbol{l}}^{(\ )}\sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )}\sum_{(j^{sa}=j_{sa})}\sum_{j_i}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-\ -\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{s}}\sum_{(n_s=n_{sa}+j^{sa}}^{(\ )}$$

$$\frac{(n_i+j \quad \mathbb{k}_1-\ -j_{sa})!}{(\ -n_{\cdot}-\mathbb{k}_1-\ )!\cdot(n \quad -j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s \quad \boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l} = \ {}_{\boldsymbol{i}}\boldsymbol{l} \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s \quad {}_{sa}^{ik}-1 \leq \quad \leq j^{sa} \quad {}_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j \quad -s \wedge j^{sa}+ \quad -j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \quad \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \quad \boldsymbol{l_{ik}} \wedge \boldsymbol{l} \quad -j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \quad \boldsymbol{l} = \mathbb{k} > \quad \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{s} \quad = j_{sa} - \quad \wedge j_s^s \quad j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s} \quad , \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{s} \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = \quad + \mathbb{k} \wedge$

$\mathbb{k}_z \quad \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\ {}_{i}\boldsymbol{l}}^{(\ )}\sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_{ik}}-\ {}_{i}\boldsymbol{l}+1}\ \sum_{(j^{sa}=j_{sa})}^{\left(\boldsymbol{l_{sa}}-\ {}_{i}\boldsymbol{l}+1\right)}\ \sum_{j_i=s}^{\boldsymbol{l_i}-\ {}_{i}\boldsymbol{l}+1}$$

GULDUNYA

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\ \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-\cdots)!}{(n_s+j_i-\boldsymbol{n}-\cdots-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\cdots-j_{sa}^{ik}+1)!}{(\boldsymbol{l_{ik}}-\cdots-\boldsymbol{l_s}+1)!\cdot(j_{ik}-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}-\cdots-j\cdots)!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=\ \boldsymbol{i}\boldsymbol{l}}\ \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}\ \sum_{(j^{sa}=j_{sa})}^{(\ )}\ \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\ \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

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$$\frac{(n_i + j^{sa} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j^{sa} - j_i - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

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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, 2.3.3.1.1.2.1.1/230-231
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-bir bağımsız durumlu 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, 2.3.3.1.1.6.1/3-4

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, 2.3.3.1.6.1.1.1/5

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 bağımlı 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-bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
tek kalan simetrik olasılık, 2.3.3.1.9.2.3.1/7
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, 2.3.3.3.7.1.1.1/7
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, 2.3.3.3.7.1.2.1/7
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, 2.3.3.3.7.1.3.1/7
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, 2.3.3.1.7.7.1.1/7

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 bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

tek kalan simetrik olasılık, 2.3.3.1.11.2.2.1/17

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 ilk herhangi iki ve son durumunun bulunabileceği olaylara göre tek kalan düzgün olmayan simetrik olasılığın, tanım ve eşitliklerinden oluşmaktadır.

VDOİHİ Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre 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 ilk herhangi iki ve son durumunun bulunabileceği olaylara göre 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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