VDOİHİ

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

Cilt 2.3.2.3.7.1.1.516

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 ilk düzgün olmayan simetrik olasılık Cilt 2.3.2.3.7.1.1.516

İsmail YILMAZ

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1. Bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk 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

$_{fz}S^{\dot{I}SO}_{j_s\ ,j_{ik},j^{sa},j_i}$

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.

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- ✓ 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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Dizin .....

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

${}_{fz}S_{j_i}^{\text{İS}}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

${}_{fz}S_{j_i,0}^{\text{İS}}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

${}_{fz}S_{j_i,D}^{\text{İS}}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

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

${}_{fz}^{0}S_{j_i,0}^{\text{İS}}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

${}_{fz}^{0}S_{j_i,D}^{\text{İS}}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

$_{fz}S^{\dot{I}S}_{j^{sa}}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin durumuna bağlı ilk simetrik olasılık

$_{fz}S^{\dot{I}S}_{j^{sa},0}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin durumuna bağlı ilk simetrik olasılık

$_{fz}S^{\dot{I}S}_{j^{sa},D}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin durumuna bağlı ilk simetrik olasılık

$_{fz}S^{\dot{I}S}_{j_s,j_i}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

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$_{fz}{}^{0}S^{\dot{I}S}_{j_s,j_i}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız veya bağımlı-bağımsız veya bağımsız-bağımsız durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre ilk simetrik olasılık

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$_{fz}S^{\text{İS}}_{j_{ik},j^{sa}}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin herhangi iki durumuna bağlı ilk simetrik olasılık

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${}_{fz}S^{\dot{I}SO}_{j_{i,0}}$: bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılık

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E2

BAĞIMLI ve BİR BAĞIMSIZ OLASILIKLI FARKLI DİZİLİMSİZ DAĞILIMLAR

Bağımlı ve Bir Bağımsız Olasılıklı Farklı Dizilimsiz Dağılımlar

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

Bağımlı dağılım ve bir bağımsız olasılıklı durumla oluşturulabilen dağılımlara ve bağımlı olasılıklı dağılımların kendi olay sayılarından (bağımlı olay sayısı) büyük olanlara (bağımlı olay sayısı) dağılımıyla bağımlı ve bir bağımsız olasılıklı dağılımlar denir. Bağımlı dağılım farklı dizilimsiz dağılımlara uygulandığında, bu dağılımlara bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlar denir. Bağımlı ve bir bağımsız olasılıklı dağılımlar; bağımlı dağılımlara, bağımsız durumlar ilk paydan dağıtılmaya başlanarak tabloları elde edilir. Bu bölümde verilen eşitlikler, bu yöntemle elde edilen kurallı tablolara göre verilmektedir. Farklı dizilimsiz dağılımlarda durumların küçükten-büyüğe sıralamasıyla 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 hariçtinde dağılımın herhangi bir durumuyla başlayan dağılımlar (bunun yerine farklı dizilimli dağılımlarda simetride bulunmayan bir durumla başlayan dağılımlar) ve dağılımın ilk durumu simetrik olan 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 kullanılmıştır. Bu eşitlikler, bir bağımlı ve bir bağımsız olasılıklı dağılımlar için VDO Cilt 1'de çıkarılan eşitliklerle birleştirilerek, bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz dağılımlar için yeni eşitlikleri elde edilecektir. Eşitlikleri adlandırılmasında bağımlı olasılıklı farklı dizilimsiz dağılımlarda kullanılan adlandırmalar kullanılacaktır. Bu adların 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 bağımlı olasılıklı dağılımın ilk bağımlı durumuyla başlayan dağılımlarda, simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılığın eşitlikleri verilmektedir.

GÜLDÜNYA

SİMETRİDEN SEÇİLEN DÖRT DURUMA GÖRE İLK DÜZDÜN OLMAYAN SİMETRİK OLASILIK

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

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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

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

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

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

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

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

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

$$
{}_{fz}S_{j_s\ ,j_{ik},j}{}_{i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}
$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{(n_i-j_s+1)}$$

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

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

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

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

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

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

$2 \leq j_s \leq j_{ik}+j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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$$D > \boldsymbol{n} < n$$

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

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

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

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

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

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

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

$$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j^{ik}-1 \leq j_{ik} \leq +j_{sa}^{ik}-j \wedge$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l}$$

$$\frac{(\boldsymbol{l}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$2 \le j_s \le j_{} - j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \le j_{ik} \le j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(\boldsymbol{l_s}-$$

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

$$\frac{(D-$$

$$\frac{(D-$$

$$\sum_{k=1}^{(\boldsymbol{n}-s+1)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{\boldsymbol{n}=1}^{(\boldsymbol{n}-\boldsymbol{l_i}-1)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-\boldsymbol{l_i}-1)}$$

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

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

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

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

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

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

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

$2\leq j_s\leq j_i+j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$
\sum_{k=1} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{n}-s+1)}
$$

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{k=1}^{} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{n}-s+1)}$$

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

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

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

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

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

$$\frac{(D - \boldsymbol{l_i}$$

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

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

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(\boldsymbol{l_s}-$$

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

$$\frac{(D$$

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

$$\sum_{k=1}^{(\boldsymbol{n}-s+1)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-1)}^{(\boldsymbol{n}-1)}\sum_{j_{ik}=j_{ik}-\boldsymbol{l_s}}^{(\quad)}(j^{sa}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})\sum_{(n_i-j_s+1)}^{n_s-j_{sa}}$$

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

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

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

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

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

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

$2 \leq j_s \leq j_i \quad j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

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

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

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k}-\mathbb{k}_1 = 0 \wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

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

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

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

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

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

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

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

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

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

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

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

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\ )}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{(\boldsymbol{n}+j_{sa}-s)}\ \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{n}\ \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}-j_i}\ \sum_{n_s=\boldsymbol{n}-j_i+1}\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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$2 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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

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

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

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

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

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

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

$$fz^{S} \ldots = \sum \ldots \sum_{\ldots (j_s \ldots + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$2\leq j_s\ldots j_{ik}-j_{sa}^{ik}+1\ldots j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\frac{(n_{s}-1)!}{(n_{s}+j_{i}-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\text{[illegible]}}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)\text{[illegible]}(j_s-2)!}$$

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

$$\frac{(\text{[illegible]}\boldsymbol{l_i})!}{\text{[illegible]}\boldsymbol{n}-\text{[illegible]}\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\text{[illegible]}1}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}-\text{[illegible]}\boldsymbol{n}+j_{sa}^{ik}-\text{[illegible]}}^{\text{[illegible]}^{ik}_{sa}-s}\sum_{\text{[illegible]}-j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\text{[illegible]}j_{sa}-s)}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

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

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

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

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

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

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

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

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

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

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

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_i+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

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

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

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

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

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

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

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

$2 \leq j_s \leq j_{ik} - j_{sa} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$
\sum_{k=1}^{(\boldsymbol{n}-s+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}
$$

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$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

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

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

$$\frac{(n_i}{(j_s-2)}$$

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

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

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

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

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

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

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

$$\sum_{k=1}^{(\boldsymbol{n}-s+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ \ )} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

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

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

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

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

$$\frac{(D-\boldsymbol{l_i}$$

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

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

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{k=1}^{(\boldsymbol{n}-s+1)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{}$$

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s}^{(\boldsymbol{n}-s}$$

$$\sum_{j_{ik}=j_s}^{(\quad)}\sum_{-\boldsymbol{l_s}\,(j^{sa}=}^{}\sum_{j_{sa}-j_{sa}^{ik})\,j_i-}^{}\boldsymbol{l_i}-\boldsymbol{l_{sa}}$$

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

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

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

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

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

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

$2\leq j_s\leq j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

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

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

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k}-\mathbb{k}_1 = 0 \wedge$

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

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

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

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

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

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

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

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

$$\frac{(n_i}{(j_s-2)}$$

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

$$\frac{(n_{ik}}{(j^{sa}-j_{ik}}$$

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

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

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

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

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

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

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

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

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

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

$$\frac{(D-\boldsymbol{l_i}$$

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

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

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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

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

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

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

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

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

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

$$fz^{S}[illegible] = \sum_{[illegible]} \sum_{(j_s[illegible]+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{[illegible]}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}[illegible]} \sum_{[illegible]=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{([illegible]_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

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

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

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

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

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

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

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

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

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

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

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

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - \ldots)}^{(\boldsymbol{n} + j_{sa} - s)} \sum_{j^{sa} \ldots - \boldsymbol{l_{sa}}}$$

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

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

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

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

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

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

$2 \leq j_s \ldots j_{ik} - j_{sa}^{ik} + 1 \ldots j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = \boldsymbol{l_s} + \boldsymbol{n} + j_{sa}^{ik} - D - 1}^{\boldsymbol{n} + j_{sa}^{ik} - D - j_{sa} - 1} \quad \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{n} + j_{sa} - s)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}-\boldsymbol{l_i})!}{(\boldsymbol{n}-\boldsymbol{l_i}-j_i)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}}}^{}\sum_{}^{}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+j_{sa}^{ik}-D}^{\boldsymbol{n}^{ik}-s}\sum_{(j_{ik}+j_{sa}-j_{sa}^{ik})}^{(j_{sa}-s)}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{(\quad)}\sum_{(j_s=j_{\quad}-\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{\quad}}^{\boldsymbol{n}+j_{sa}^{ik}-s}\ \sum_{(\quad=j_{ik}+j_{sa}-j_{\quad}}^{(\quad)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$(\quad j_s+1)$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}(\quad}\ \sum_{=\boldsymbol{n}+\mathbb{k}-j_s}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$)$$

$$\sum_{(n_{sa}=n_{ik}+\quad(-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\geq \boldsymbol{n} < \quad \wedge \boldsymbol{l_s} > D - \quad + 1 \wedge$

$2 \leq j_{\quad} \leq j_{ik} - j_{\quad} \quad \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \quad ^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\quad - j_{sa}^{ik} \quad = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{=\boldsymbol{n}+\mathbb{k}}^{n_{is}-j_{ik}-\mathbb{k}_1} \sum_{j_{ik}+1}
$$

$$
(n_{ik}+ \quad -j^{sa}-\mathbb{k}_2)\ n_{sa}+ \quad -j_i \sum_{=\boldsymbol{n}-j^{sa}} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is}}{(j_s-2)\ (n_i-n_{is}-j_s+1)!} \cdot
$$

$$
\frac{{}_{is}-n_{ik}\ -1)!}{(j_{ik}-j_s-1)\ (n_{is}+j_s-n_{ik}-j_{ik})!} \cdot
$$

$$
\frac{(n_{sa}-n_{sa}-1)!}{{}_{sa}-j_{ik}\ -1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{{}_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!} \cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!} \cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} +
$$

$$
\sum_{k=1}^{(\boldsymbol{n}-s+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}
$$

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$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\boldsymbol{n}-s+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa}$ $s - j_{sa} \leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} >$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_s$ $- s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} -$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right.$ $\wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-1)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-1)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-1)!\cdot(j^{sa}+j_s-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\boldsymbol{n}-s+1)}\sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{(\boldsymbol{n}+j_{sa}-s)}\sum_{j_{ik}=\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(-j_i)!}$$

$$\sum_{k=}^{(\boldsymbol{n}-s+}\ \sum_{=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}}$$

$$\sum_{j_{ik}=j_s}^{(\ )}\ \sum_{-\boldsymbol{l_s}\,(j^{sa}=}\ \sum_{j_{sa}-j_{sa}^{ik})\,j_i-}\ \sum_{\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+}\ \sum_{-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{l} \quad n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{-} - j_{sa}^{ik}+1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_i}}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \ \sum_{(j^{sa}=}^{(j_i+j_{sa}-s)} \ \sum_{D)\ j_i=}^{\boldsymbol{n}} \ \sum_{+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \ \sum_{+\mathbb{k}-j_s+1)}^{(n_i-j_{}} \ \sum_{=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-} \ \sum_{\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=}^{+j_{ik}-} \ \sum_{^{sa}+1)}^{+j^{sa}-j_i} \ \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \quad)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(\quad - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

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$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_{sa}}$$

$$\frac{(n_i+j_{sa}-\boldsymbol{n}-\mathbb{k}_1-D-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+j_{sa}-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 = \boldsymbol{l_i} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k}_1 = 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_s^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \ldots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_1: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

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$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-} \sum_{=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}}{(j_{ik}-j_s}$$

$$\frac{(n_{ik}}{(j^{sa}-j_{ik}}$$

$$\frac{}{(n_{sa}-n_s}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\boldsymbol{n}-2)!\cdot(\boldsymbol{n}-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_{ik} + s - j_{sa} \leq j_i < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{ik} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \ldots \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(\boldsymbol{l_{sa}}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{\quad - 1)!}{(n_s + \quad - \boldsymbol{n} - 1)$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s}$$

$$\frac{\quad + j_{sa}$$

$$\frac{(\boldsymbol{l_i}$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s)}^{(\boldsymbol{n} + j_{sa} - s)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j_{sa},j_i}=\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}-j_{sa}} \quad \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_i}+j_{sa}-D-s-1)} \quad \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \quad \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \quad \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\right)}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(D-\boldsymbol{l})!}{(D+j_{\boldsymbol{l}}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\quad-j_i)!}+$$

$$\sum_{j_{ik}=\boldsymbol{l_s}}^{(\quad)}\sum_{(\quad)}^{(\quad)}\cdots\sum_{(\quad)}^{(\quad)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{j_{sa}^{ik}-D-1}^{(\boldsymbol{n}+j_{sa}-s)}\ \sum_{(j^{sa}=\boldsymbol{n}+j_{sa}-D-s)}^{\boldsymbol{n}}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{is}+j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=1}^{\boldsymbol{n}}\sum_{(j_s=j_i+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{\boldsymbol{n}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ )}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i+\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-n+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}-1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_s})}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \quad \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{n}+j_{sa}-s)} \quad \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-}^{\boldsymbol{n}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \quad \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+}^{(n_i-j_s+1)} \quad \sum_{=\boldsymbol{n}+\mathbb{k}}^{n_{is}-j_{ik}-\mathbb{k}_1} j_{ik}+1
$$

$$
(n_{ik}+ - j^{sa}-\mathbb{k}_2)\ n_{sa}+ - j_i
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}}^{} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is}}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{{}_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{} - n_{sa} - 1)!}{{}_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{{}_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_s})}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - \quad)! \cdot (\quad - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \quad - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} \quad _{sa}^{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j \quad + s - j_{sa} \leq j_i \quad \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j \quad > \boldsymbol{l_{ik}} \wedge \boldsymbol{l} \quad j_{sa} - s >$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \quad _{sa} = j_{sa}^{ik} - 1$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \quad \cdots, j_{sa}^{i}\right\} \wedge$

$s \quad 4 \wedge \boldsymbol{s} = \quad \mathbb{k} \wedge$

$\mathbb{k}_z: \quad = 2 \wedge \mathbb{k} = \mathbb{k} \quad \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\boldsymbol{l_{sa}}+\boldsymbol{l_{sa}}-j_{ik}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ \ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j_{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s}^{\boldsymbol{n} + j_{sa}^{ik} - s} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa},\ldots} = \sum_{k=1}^{} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=\boldsymbol{l_i}-\boldsymbol{l_s}}^{\boldsymbol{n}}\sum_{(D-s+1)}^{(\boldsymbol{n}-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}\sum_{(j^{sa}+j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}-s)}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{(\quad -s+1)}\ \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}\quad -s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l}\quad}\ \sum_{(j_{sa}=j_{ik}+j_{sa}-j\quad)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}\quad}^{n}\ \sum_{(\quad=\boldsymbol{n}+\mathbb{k}-j_s\quad)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+\quad-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i\quad\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\geq \boldsymbol{n} < \quad \wedge \boldsymbol{l_s} > D - \quad + 1 \wedge$

$2 \leq j_{\quad} \leq j_{ik} - \quad \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \quad \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \quad = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)} \sum_{=\boldsymbol{n}+\mathbb{k}}^{n_{is}-j_{ik}-\mathbb{k}_1} \sum_{j_{ik}+1}^{}
$$

$$
(n_{ik} \quad -j^{sa}-\mathbb{k}_2)\ n_{sa} \quad -j_i
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - }{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} }{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{i} - n_{sa} - 1)!}{sa - j_{ik}) \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1}^{(\boldsymbol{n}-s+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}
$$

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$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_{sa}-1)!\cdot(n_{is}+j_{sa}-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{n}-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\boldsymbol{n}-2)!\cdot(\boldsymbol{n}-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s,\, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{i\ldots,j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{\boldsymbol{+l_{ik}-l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{j_{ik}=j_{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\sum_{(j^{sa}=\boldsymbol{l_{sa}}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\boldsymbol{l_s}>\boldsymbol{n}-1\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$$

$$2\le j_s\le j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\le j_i\le\boldsymbol{n}\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{n_i=\boldsymbol{n}+\mathbb{k}-j_s+1}^{\boldsymbol{n}} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{\boldsymbol{n}+\mathbb{k}_2-j_{ik}} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{\boldsymbol{n}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s}\ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )}\ \sum_{j_i=}^{\ }$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-}^{\ }\ \mathbb{k}_1$$

$$\sum_{(n_{sa}=n_i-}^{(\ )}\ \sum_{j^{sa}-j_i}$$

$$\frac{\left(n_i+\ -j_i-\ -\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}-j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>\ -\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}\ ^{ik}_{sa}+1\wedge\ +j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}\ j_{sa}-j_{sa}^{ik}\leq j\ \leq j_i+j_s\ \wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}\ 1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}\ j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge\ -\mathbb{k}>\ 0\wedge$

$j_{sa}\geq j_{sa}\ 1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1\ ,\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{i}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} \quad + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} \quad 1)!}{(j_{ik} - j_s \quad 1)! \cdot (n_{is} + j_s \quad n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} \quad n_{sa} - 1)!}{(j^{sa} - j_{ik} \quad 1)! \cdot (n \quad + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a - n_s \quad 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(\boldsymbol{n}-s+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\boldsymbol{n}-s+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ \ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{i\ldots,j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{(D-}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(}-$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )}\ \sum_{(j^{sa}=j_{sa}+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}\ \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$> \boldsymbol{n} \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \le j_s \le j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \le j_{ik} \le j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \le j^{sa} \le j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ldots k-j_{sa}^{ik}+1)} \sum_{(j_s=\ldots+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_i}\ldots}^{(\ldots a-s)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-\ldots)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\ldots}^{n} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-\ldots 1)}^{\ldots-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{\ldots j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{\ldots a=\boldsymbol{n}-j^{sa}+1)}^{\ldots k+j_{ik}-j^{\ldots}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

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$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}} -j_{ik}-\mathbb{k}_1$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \sum_{\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^s}$$

$$\frac{\left(n_i+ \mathbb{k}_1-\ -j_{sa}^{ik}\right)!}{(\ -\ -\mathbb{k}_1-\ )!\cdot(\ -j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\ -j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D\ j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}\ 1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}\ 1 \leq j_{ik} \leq\ a+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+\ -j_{sa}^{ik} \leq j^{\ } \leq j_i+j_{sa}-s \wedge\ a-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 >\ \wedge \boldsymbol{l_{sa}}+\ ik-j_{sa} \geq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq\ < n \wedge I=\mathbb{k}\ =0 \wedge$

$j_{sa} \leq j_{sa}^{i}\ 1 \wedge j_{sa}^{ik}=j_s\ -1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\colon\{j_s^s\ \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2\ , j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}\ s+\mathbb{k} \wedge$

$\ \cdot z=2\ \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{i}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-} \sum_{=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - 1)}{(j_s - 2)\ (n_i - n_{is}\ + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik}\ 1)!}{(j_{ik} - j_s\ 1)\ (n_{is} + j_s\ n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik}\ n_{sa} - 1)!}{(j^{sa} - j_{ik}\ 1)! \cdot (n\ + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a} - n_s\ 1)!}{j_i - j^{sa} - 1)\ (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}$ $s-j_{sa} \leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_s$ $-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j^{i}\right.$ $\wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}-1)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}-1)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\boldsymbol{n}-s+1)}\ \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{}$$

$$\sum_{j_i}^{\boldsymbol{n}+j_{sa}^{ik}-s}\ \sum_{s+j_{sa}^{ik}-1}^{(\ )}\ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\boldsymbol{l_{sa}}}^{(\boldsymbol{n}-s+1)}\sum_{\boldsymbol{l_{sa}}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}}^{(\boldsymbol{n}-s+1)}$$

$$\sum_{j_{ik}=j_s}^{(\boldsymbol{l_{ik}}-1)}\sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\boldsymbol{n}-s+1)}\sum_{j_i=j_s}^{(\boldsymbol{n}-s+1)}\sum_{\boldsymbol{l_i}=\boldsymbol{l_{sa}}}^{(\boldsymbol{n}-s+1)}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{is}-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_{is}-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{sa}-j_s+1)}\sum_{n_s=n_{sa}+j^{sa}-j_i}^{(n_{sa}-j_s+1)}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{l_s} \leq \boldsymbol{n} \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}-j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-} \sum_{+s+\boldsymbol{n}} -j_{sa}^{ik}
$$

$$
\sum_{n_i=\boldsymbol{n}+} \sum_{} \sum_{\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}
$$

$$
\sum_{(n_{sa}=} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s -)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(- j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

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$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_{ik}}+s+\boldsymbol{n}-D-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+ \quad \mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i- \quad -\mathbb{k}_1- \quad)!\cdot(\boldsymbol{n}- \quad -j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}- j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D- j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}- \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}- 1 \leq j_{ik} \leq a+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+ -j_{sa}^{ik} \leq j^{s} j_i+j_{sa}-s \wedge j_i-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \wedge \boldsymbol{l_{sa}}+ -j_{sa} \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq < n \wedge I=\mathbb{k} \geq 0 \wedge$

$j_{sa} \leq j_{sa}^{i} 1 \wedge j_{sa}^{ik}=j_s - 1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s} \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2 \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} + \mathbb{k} \wedge$

$z=2 \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fz S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

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$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}$ $s-j_{sa} \leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_s$ $-s=\boldsymbol{l_s}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j^{i}$ $\wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k} =$ $+\mathbb{k}_2 \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - \quad)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \quad)!}{(\boldsymbol{l_s} - j_s)! \cdot (\quad - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_s + 1)!}{(j_s + \boldsymbol{l_{ik}} - \quad)! \cdot (j_{ik} - \quad - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \quad - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_i = \boldsymbol{l_{ik}} + \boldsymbol{n} - D}^{\boldsymbol{n} + j_{sa}^{ik} - s} \sum_{(j^{sa} = j_{ik} + \boldsymbol{l_{sa}} - \boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

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$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{\sim} j_{sa}^{ik}, j_{sa}^{ik} = \sum \sum_{(\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{n}+j_{sa}^{ik}} \sum_{(j_{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1}^{(\boldsymbol{n}-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum^{(\ )} \sum \qquad -\boldsymbol{l_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum^{(n_i-j_s+1} \sum^{n_{is}+j_s-j_{ik}-} \sum_{\mathbb{k}_2-j_{ik}+1}$$

$$\sum \sum_{(n_{sa}=\boldsymbol{n}-j_i+1)}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s -)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{ik - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=1} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}^{(\boldsymbol{n}-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\mathbb{k}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j_{sa}-j_{ik}-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-j_s-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}-j_s-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{n} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} \wedge \mathbb{k} = 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_s^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j^{sa}, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$z = 3 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i - 1)}{(j_s - 2) \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s + 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\ )!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\ -\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}\ _{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j\ +s-j_{sa} \leq j_i\ \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{\ } = \boldsymbol{l_{ik}} \wedge \boldsymbol{l}_{\ }-j_{sa}-s > \ \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge\ _{sa}^{s} = j_{sa}^{ik}-1$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \ \cdots, j_{sa}^{i}\right\} \wedge$

$s\ \ 4 \wedge \boldsymbol{s} = \ \ \mathbb{k} \wedge$

$\mathbb{k}_z: = 2 \wedge \mathbb{k} = \mathbb{k}\ \ \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)}\ \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{n}}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} + \boldsymbol{n} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{n} - j_{ik} - \boldsymbol{l_{ik}})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{}{(n_s +$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s}$$

$$\frac{(\boldsymbol{l_{ik}}$$

$$\frac{(\boldsymbol{l_i}$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s)}^{(\boldsymbol{n} + j_{sa} - s)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s \ldots j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{\boldsymbol{l_i}+\boldsymbol{n}+j\ldots D-s-1} \sum_{j\ldots=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{(\ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}-j_i} \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D+\boldsymbol{l_i})!}{(D+j_i+\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{(j_{ik}=\boldsymbol{n}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}\sum_{j_{ik}=\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{is}+j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{\left(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s}\right)! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{}$$

$$\sum_{n_{sa}=n_{ik}}^{} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_{sa} \leq j_{ik} - j_{sa} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$j_{sa} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ \ )} \sum_{=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-}^{n_{is}+j_s-\mathbb{k}_1}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+}^{(n_{ik}+j_{ik}-j} \sum_{-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

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$$\sum_{k=1}^{(\boldsymbol{n}-s+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{sa}=}^{(n_{ik}+j_{ik}} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}-j_i}$$

$$\frac{(n_i - n_{i\cdot} - 1)!}{(j_s - 2)! \cdot (\quad j_s + 1)!} \cdot$$

$$\frac{(n_{is} \quad n_{ik} - 1)!}{(j_{ik} - j_s \quad 1)! \cdot (n_{is} \quad j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} \quad n_{sa} - 1)!}{(j^{sa} \quad j_{ik} - 1)! \quad n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(\quad - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\boldsymbol{n}-s+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )}\left(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}}\right)\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=}+j^{sa}-j_i$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\left(\boldsymbol{n}+j_{ik}-\right)!}\cdot\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-)!\cdot(j_s-2)!}\cdot\frac{(D-}{(D+\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j^{ik}\leq j_{ik}\leq +j_{sa}^{ik}-j\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i-j_{sa}-s\wedge j^{sa}-j_{sa}-j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-\ >\boldsymbol{l_{ik}}\wedge\boldsymbol{l}\ j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\ <n\wedge I=\ =0\wedge$

$j_s\leq j_{sa}^{i}-1\ j_{sa}^{ik}=j_{sa}\ 1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{\ \mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa}\cdots,j_{sa}^{i}\}\wedge$

$\geq 4\wedge\ \leq s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}\ \ _2\Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\left(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i}\right)\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i + j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}$ $s-j_{sa} \leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} >$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_s$ $-s=\boldsymbol{l_s}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j^{i}\right.$ $\wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2 \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\cdots)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\cdots)!}{(\boldsymbol{l_s}-j_s)!\cdot(\cdots-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}\cdots+1)!}{(j_s+\boldsymbol{l_{ik}}-\cdots)!\cdot(j_{ik}-\cdots-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{\cdots+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\cdots+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\cdots-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{\cdots=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{n}+j_{sa}-s)}\ \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fz^{S_{j_s} \cdots j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\right)}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\quad-j_{sa}\right)!}$$

$$\frac{(D-$$

$$\frac{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{l}-j_i)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{l}-j_i)!}+$$

$$\sum_{\quad+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s}\ \sum_{(j^{sa}\geq+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+j_s-)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{\left(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}\right)!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{j_s=j_{ik}-j_{sa}^{ik}+1}^{(\quad)}\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-s}^{\boldsymbol{n}+j_{sa}^{ik}-s}\sum_{(j^{sa}=j_{ik}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_{ik}=\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < \quad \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq \quad - j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{s}\ \boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{\ \mathbb{k}-j_s+1)}^{(n_i-j_{s}\ )} \sum_{\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s\ \mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\ \ {}^{sa}+1)}^{\ \ {}_{ik}+j_{ik}-j} \sum_{n_s=\boldsymbol{n}-j_i+1}^{\ \ {}^{+j^{sa}-j_i}}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \ \ )! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(\ \ {}_{is} - n_{ik} - 1)!}{(\ \ {}_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(\ \ - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=1}^{(\boldsymbol{n}-s+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}}^{(n_{ik}+j_{ik}} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{i}$$

$$\frac{(n_{is}$$

$$\frac{(n_{ik}$$

$$\frac{(n_{sa}-n_s-1)!}{(j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\boldsymbol{n}-s+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1\right.}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)}$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-$$

$$\frac{(D-$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s +$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik}$

$D \geq$

$j_{sa}^{s} \leq j_{sa}^{i} - 1$

$\boldsymbol{s}: \{$

$\geq 4 \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k}$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{n}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa}$ $s - j_{sa} \leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} >$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_s$ $- s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} -$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j^{i}\right.$ $\wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_s$$

$$\frac{}{(j_s+\boldsymbol{l_{ik}}-$$

$$\frac{}{(j_{ik}+\boldsymbol{l_{sa}}-j^{s}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{n}+j_{sa}-s)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s \ldots j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\right.}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\right.-j_{sa})!}$$

$$\frac{(D-$$

$$(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{l}-j_i)!}+$$

$$\sum_{}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{}^{+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+}^{\boldsymbol{n}+j_{sa}^{ik}-s}\ \sum_{}^{-D-j_{sa}}\ \sum_{(j^{sa}\geq}^{(\boldsymbol{n}+j_s-}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{}^{+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{(j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-1)}^{\boldsymbol{n}+j_{sa}^{ik}-s}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{}$$

$$\sum_{n_{ik}=n_{is}+\mathbb{k}\,(n_{is}=\boldsymbol{n}+j_s+1)}^{n}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}^{}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < \wedge\ \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq \ - j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=\boldsymbol{l_{sa}}}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{\mathbb{k}-j_s+1)}^{(n_i-j} \sum_{\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s}
$$

$$
\sum_{(n_{sa}=}^{+j_{ik}-} \sum_{n_s=\boldsymbol{n}-j_i+1}^{+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \ )! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(\ - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=1}^{} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{(\boldsymbol{n}-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}} -j_{ik}+1$$

$$(n_{ik}+j_{ik}$$

$$\sum_{(n_{sa}=\boldsymbol{n}}^{} \sum_{sa}+1) \quad n_s=\boldsymbol{n}-j_i$$

$$\frac{(n_i - n_{i}$$

$$\frac{(n_{is}$$

$$\frac{(n_{ik}$$

$$\frac{(n_{sa}-n_s-1)!}{(j^{sa}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{(\boldsymbol{n}-s+1)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right) \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1\right.}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)} \cdot \frac{-j_s\big)!}{\left(\boldsymbol{n}+j_{ik}-j_i\right.}$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_$$

$$\frac{(D-$$

$$(D+j_$$

$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$$

$$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j^{ik}$$

$$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}$$

$$D \geq$$

$$j_s$$

$$\boldsymbol{s}: \{$$

$$\geq 4 \wedge$$

$$\mathbb{k}_z: z=2 \wedge \mathbb{k}$$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=j_{sa}+1)}^{\boldsymbol{l_{sa}}+j_{sa}-s} \sum_{j_i=s+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{sa} + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{sa}})} \sum_{(j^{sa}=j_{sa}+1)}^{\boldsymbol{l_i}} \sum_{j_i=\boldsymbol{l_{sa}}+j_{sa}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{-1)!}{(n_s +$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s}$$

$$\frac{(\boldsymbol{l_i} +$$

$$\frac{(D$$

$$\sum_{k=1}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\sum_{j_i=s+1}^{\boldsymbol{l_{sa}}+j_{sa}-s}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{j_s\ ,j_{ik},\ j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}}^{(j_i - s)} \sum_{(j^{sa} = j_{sa} + 1)}^{\boldsymbol{l_{ik}} + j_{sa}^{ik} - s} \sum_{j_i = s+1}$$

$$\sum_{i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{sa}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\sum_{(j^{sa}=j_{sa}+\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1)}^{(\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik})}\sum_{j_{ik}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}_1}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}_1+1)}^{n_i-j_s}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{ik}+j_{ik}-j_{ik}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=s+1}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_{sa}}$$

$$\frac{(n_i+j_{sa}-\boldsymbol{n}-\mathbb{k}_1-\boldsymbol{l_i}-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_i} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} = 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_s^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{i}, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_1 : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

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$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=j_{sa}+1)}^{\boldsymbol{l_s}+s-1} \sum_{j_i=s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i - 1)}{(j_s - 2) \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{(j^{sa}=j_{sa}+1)}^{\boldsymbol{l_i}} \sum_{j_i=\boldsymbol{l_s}+s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}} + s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=s+1}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{j_s, j_{ik}, \ldots, j_i} = \sum_{k=1} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{(j^{sa} = j_{sa}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i = j^{sa} + s - j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)!\cdot(n_i - n_{is} - j_s + 1)!}\cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)!\cdot(n_{is} + j_s - n_{ik} - j_{ik})!}\cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)!\cdot(n_{ik} + j_{ik} - n_{sa} - j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(\quad\boldsymbol{l_i})!}{(D+j_{\quad}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot\quad j_i)!}-$$

$$\sum_{1\ (j_s}^{(\ )}\ \sum_{+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}}^{(\boldsymbol{l_{sa}})}\ \sum_{(j^{sa}=j_{sa}\quad)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{\quad i=\boldsymbol{n}+\mathbb{k}\ (n_{is}-\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_{\quad}+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < \wedge\ \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s \ldots + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j \ldots a+1)}^{(\boldsymbol{l_{ik}}+j^{ik}-s)} \sum_{j_i=j^{sa}+s \ldots}
$$

$$
\sum_{\ldots n+\mathbb{k}}^{n} \sum_{(n_{is} \ldots \mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{\ldots -j_{ik}+1}^{\ldots is+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{\ldots a=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+\ldots j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{\ldots 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{\ldots ik - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

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$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}} -j_{ik}-\mathbb{k}_1$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \sum_{\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^s}$$

$$\frac{\left(n_i + \right. \mathbb{k}_1 - \left. j_{sa}^{ik}\right)!}{(- \mathbb{k}_1 -)! \cdot (- j_{sa}^{ik})!} \cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(- j_s)! \cdot (j_s-2)!} \cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D - j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + - j_{sa}^{ik} \leq j^{ } \leq j_i + j_{sa} - s \wedge a - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \leq \wedge \boldsymbol{l_{sa}} + ik - j_{sa} \leq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq < n \wedge I = \mathbb{k} = 0 \wedge$

$sa \leq j_{sa}^{i} 1 \wedge j_{sa}^{ik} = j_s - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_s^s \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} s + \mathbb{k} \wedge$

$\cdot z = 2 \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

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$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{\boldsymbol{n}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i - \quad - 1)}{(j_s - 2) \cdot (n_i - n_{is} \quad + 1)!} \cdot$$

$$\frac{(n_{is} - n_{i} - 1)!}{(j_{ik} - \quad \cdot (n_{is} + \quad - n_{ik} - j_{ik})!}$$

$$\frac{(n_{i} - n_{sa} - \quad}{(j^{sa} - j_{i} - 1)! \cdot (\quad + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1) \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l_i}$$

$$(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa}$ $s - j_{sa} \leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_s$ $- s > \boldsymbol{l_s}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} -$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j^{i}\right.$ $\wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s\ , j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\quad)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\quad)!}{(\boldsymbol{l_s}-j_s)!\cdot(\quad-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\quad)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\quad)!\cdot(j^{sa}+j_s-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\;-$$

$$\sum_{k=1}^{(\quad)}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\quad)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

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$1 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S}_{j_{ik}, j_{sa}^{ik}} = \sum_{j_{ik}=1}^{n} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{n} \sum_{(j_{ik}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{is}+j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}}^{(\ )}\ \sum_{j_i=j^{sa}}\ -j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_i-j_s+1}^{(\ )}\ \sum_{+1)\ n_{ik}}\ \sum_{+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}}^{(\ )}\ \sum_{+j_{ik}-j^{sa}}\ \sum_{)\ n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-\right.-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-\quad-\mathbb{k}_1-\mathbb{k}\quad\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}\quad 1\wedge\boldsymbol{l_i}\quad +s\quad\wedge$

$1\leq\quad\leq j_{ik}-j_{sa}^{ik}+\quad\wedge j_s+j_{sa}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}\quad^{ik}\leq j^{sa}\leq\quad+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}\quad+1=\boldsymbol{l_s}\quad\boldsymbol{_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<\quad=\mathbb{k}>=0\wedge$

$\quad<j^i\quad 1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s\geq 4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}-j^{sa}+1)}^{(n_{ik}+j_{ik}-\boldsymbol{n}-\mathbb{k})} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_s-2)!\cdot(n_i-n_{ik}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\quad)!\cdot(\quad-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}$ $-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j$ $+s-j_{sa} \leq j_i$ $\boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j$ $=\boldsymbol{l_{ik}} \wedge \boldsymbol{l}$ $j_{sa}-s>$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1$ $_{sa}=j_{sa}^{ik}-1$

$\boldsymbol{s}$: $\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \cdots, j_{sa}^{i}\} \wedge$

s $4 \wedge \boldsymbol{s}=$ $\mathbb{k} \wedge$

$\mathbb{k}_z$ $=2 \wedge \mathbb{k}=\mathbb{k}$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}\ \sum_{(j_s=2)}^{(\boldsymbol{l_{sa}}-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}\ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}} + s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_{sa}} - j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ \ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{\ldots_{ik},j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{\ldots_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum^{(\ )}_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(\quad \boldsymbol{l_i})!}{(D+j_{\quad}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot\quad j_i)!}\ -$$

$$\sum_{\quad=1}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+}\ \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}\ (\quad}\ \sum_{\quad=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{\quad=\boldsymbol{n}+\mathbb{k}\ (n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_{\quad}+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\wedge \boldsymbol{l_s}>1\wedge \boldsymbol{l_s}\le D-\boldsymbol{n}+1\wedge$$

$$1\le j_s\le j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\le j_i\le \boldsymbol{n}\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$$

$$D+s-\boldsymbol{n}<\boldsymbol{l_i}\le D+\boldsymbol{l_s}+s-\boldsymbol{n}-1\wedge$$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{\boldsymbol{l_s}=1}^{(\ )} \sum_{(j_s=j_{ik}-\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}-\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=j_{sa}+1)}^{j_{sa}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}_1}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)}^{n_i-j_s+1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}}^{(\boldsymbol{l_{sa}})} \sum_{(j^{sa} = j_{sa}+1)}^{\boldsymbol{n}} \sum_{j_i = \boldsymbol{l_{sa}} + s - j_{sa}+1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik}+1}^{n_{is} + j_s - j_{ik} - \mathbb{k}}$$

$$(n_{ik} + j_{ik} \quad - \mathbb{k}_2)$$

$$(n_{sa} = \quad ;^{sa}+1) \quad n_s = \boldsymbol{n} - \quad +1$$

$$\frac{(n_i - \quad - 1)!}{(\quad - 2)! \quad - n_{ik} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} \quad n_{ik} - 1)!}{(j_{ik} - j_s \quad 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} \quad n_{sa} - 1)!}{(j^{sa} \quad j_{ik} - 1)! \cdot n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\ )} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_{sa}} + s - j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\quad)!\cdot(\quad-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}$ $\quad -j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j$ $\quad +s-j_{sa} \leq j_i$ $\quad \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j$ $\quad =\boldsymbol{l_{ik}} \wedge \boldsymbol{l}$ $\quad j_{sa}-s>$ $\quad \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}$ $\quad -\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>=0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}$ $\quad =j_{sa}-1 \wedge j_{sa}^{s}$ $\quad -j_{sa}^{ik}-1$ $\quad \wedge$

$\boldsymbol{s} \leq \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}$ $\quad _a, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k}$ $\quad \wedge$

$\mathbb{k}_z: z=$ $\quad \wedge \mathbb{k}=\mathbb{k}_1+$ $\quad \Rightarrow$

$$fzS_{j_s,\ j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=j_{sa}+1)}^{\boldsymbol{l_{ik}}+s-j_{sa}^{ik}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}}) \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik})} \sum_{(j^{sa}=j_{sa}+1)}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_{ik}}+s-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-}{(\boldsymbol{l_s}-j_s)}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_s}-s)!}{(j^{sa}+\boldsymbol{l_i}-}\cdot$$

$$\frac{(D-}{(D+j_i-}-$$

$$\sum_{k=1}^{}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\ \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

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$1 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \le D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{j_s\ j_{ik}\ldots j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{} \sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \ldots}^{(j_i \ldots - s)} \sum_{(j^{sa} = j_{sa} + 1)}^{\boldsymbol{l_s} + s - 1} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{} \sum_{i = \boldsymbol{n} + \mathbb{k}}^{n \ldots} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{\ldots - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-}+$$

$$\sum_{k=1}^{(\ \ )}\sum_{(j_s=j}^{\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(}\ \sum_{=j_{sa}+1)}\ \sum_{j_i=\boldsymbol{l_s}+}^{}$$

$$\sum_{n_i=}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{}$$

$$\sum_{(\ \ =\boldsymbol{n}-j^{sa}+1)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

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$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j_{sa}-j_i}$$

$$\frac{(n_i+j_{ik}-j_{sa}-\mathbb{k}_1-j_{sa}-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(n_{ik}-j_{ik}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}-1 \leq j_{ik} \leq j_{sa}^{ik}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j_i \leq j_i+j_{sa}-s \wedge j_{sa}^{ik}+j_{sa}-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 \leq \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}-j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D-\boldsymbol{n}-\boldsymbol{n} < \boldsymbol{l_i} \leq D-\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

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$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{(j^{sa}=j_{sa}+1)}^{} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i - 1)}{(j_s - 2) \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - 1)! \cdot (n_{is} + j_{ik} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{sa} + j_i - n_s - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_{ik}} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_{ik}} - j_i - \boldsymbol{l_{sa}} + s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{sa}})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\ \ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)}\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{\boldsymbol{n}}\sum_{(j^{sa}=j_{sa}+1)}^{n}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{(n_i-j_s+1)}\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{sa}+j^{sa}-j_i}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{}\sum_{n_s=\boldsymbol{n}-j_i+1}^{}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-\boldsymbol{l_s})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(\boldsymbol{l_i}-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )}\sum_{(j^{sa}=\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}}}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D}^{(\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik})}\sum_{-j^{sa}}\ldots-j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(\ldots+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\ldots+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\ldots+j_{ik}-j^{s}\ldots)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-\ldots-\mathbb{k}_1-\mathbb{k}\ldots)!\cdot(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}\ldots 1\wedge\boldsymbol{l_s}\ldots D-\boldsymbol{n}\ldots\wedge$

$1\leq j_{ik}\leq j_{ik}-j_{sa}^{ik}+\ldots j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-\ldots^{ik}\leq j^{sa}\leq\ldots+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-\ldots+1=\boldsymbol{l_s}-\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D+s-\boldsymbol{n}\ldots\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1\wedge$

$\ldots\geq\boldsymbol{n}\ldots\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s\geq 4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}}^{(\boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s - 1)} \sum_{(j^{sa} = j_{sa} + 1)}^{\boldsymbol{n}} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} -}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s}^{(n_i - j_s + 1)} \sum_{= \boldsymbol{n} + \mathbb{k}}^{n_{is} - j_{ik} - \mathbb{k}_1} j_{ik} + 1
$$

$$
(n_{ik} \quad - j^{sa} - \mathbb{k}_2)\ n_{sa} \quad - j_i
$$

$$
\sum_{= \boldsymbol{n} - j^{sa}} \sum_{n_s = \boldsymbol{n} - j_i + 1}
$$

$$
\frac{(n_i - \quad)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} \quad 1)!}{(j_{ik} - j_s - 1) \quad (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{i} \quad n_{sa} - 1)!}{{}^{sa} - j_{ik} \quad) \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{{}_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s)}^{(\boldsymbol{l_s} + j_{sa} - 1)} \sum_{j_i = j^{sa} + s - j_{sa}}^{\boldsymbol{n}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_i-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\ )}$$

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$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = j_{sa}^{ik}+1}^{\boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s - 1} \sum_{(j^{sa} = j_{ik} + \boldsymbol{l_{sa}} - \boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{n}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-$$

$$\frac{(\boldsymbol{l_s}-j_s$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_s}-s)!}{(j^{sa}+\boldsymbol{l_i}-$$

$$\frac{(j_i+$$

$$\frac{(D$$

$$\frac{(D+j_i$$

$$\sum_{k=1}^{}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+}^{j_{sa}^{ik}-j_{sa}}\ \sum_{}^{}$$

$$\sum_{j_{sa}^{ik}-D-s}^{}\ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )}\ \sum_{j_i=}^{j_{ik}+j_{sa}-j_{sa}}$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(\ -\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D > \ \ n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{i} - j_{sa}^{ik}+1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} \ \ - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s \ldots j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_s})}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=\ldots+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\ldots-D}^{\boldsymbol{n}}
$$

$$
\sum_{\ldots+\mathbb{k}}^{n} \sum_{(n_{is}-\ldots\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}\ldots-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{\ldots=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+\ldots j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_s})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+j^{sa}+1)}^{(n_{ik}+j_{ik}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{ik}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{ik}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\quad)!\cdot(\quad-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}$ $\quad -j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j$ $\quad +s-j_{sa} \leq j_i$ $\quad \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j$ $\quad =\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}$ $\quad j_{sa}-s>$ $\quad \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}$ $\quad -\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>=0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}$ $\quad =j_{sa}-1 \wedge j_{sa}^{s}$ $\quad -j_{sa}^{ik}-1$ $\quad \wedge$

$\boldsymbol{s} \leq \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}$ $\quad _a, j_{sa}, \cdots, j_a^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k}$ $\quad \wedge$

$\mathbb{k}_z: z=$ $\quad \wedge \mathbb{k}=\mathbb{k}_1+$ $\quad \Rightarrow$

$$fzS_{j_s,\ j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{j_{ik}=j_{sa}^{ik}+1}^{(\ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}} + s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-}{(\boldsymbol{l_s}-j_s)}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_}-s)!}{(j^{sa}+\boldsymbol{l_i}-}\cdot(j_i+-j^{sa}-s)!}$$

$$\frac{(D-}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+}^{+j_{sa}^{ik}-1}\sum_{j_{sa}^{ik}-D-s}^{(\ )}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

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$1 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \le D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s \ldots j^{sa}, j_i} = \sum_{k=1}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=2)}$$

$$\sum_{=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-}+$$

$$\sum_{k=1}^{(\boldsymbol{l_{sa}}-j_{sa}+1)}\sum_{(j_s=\boldsymbol{l_i}+}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_}}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}}\sum_{(n_{is}=\boldsymbol{n}+}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}$$

$$\sum_{(}\sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

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$$\sum_{k=1}^{(\boldsymbol{l_{sa}}-j_{sa}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=j^{sa}+s-j}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}} -j_{ik}-\mathbb{k}_1$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-}^{(\ )} \sum_{\mathbb{k}_2)} \sum_{n_s=n_{sa}+j}$$

$$\frac{(n_i + \quad - \mathbb{k}_1 - \quad - j_{sa}^{ik})!}{ - \boldsymbol{n} - \mathbb{k}_1 \quad \mathbb{k}_2)! \cdot (\quad j_i - j_{sa}^{ik})!} \cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\quad - j_s)! \cdot (j_s-2)!} \cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D \quad j_i-\boldsymbol{n}-\boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \quad D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} \quad 1 \leq j_{ik} \leq \quad a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + \quad - j_{sa}^{ik} \leq j \quad \leq j_i + j_{sa} - s \wedge \quad a + \quad - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \quad \wedge \boldsymbol{l_{sa}} \quad - j_{sa} \quad \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \quad - \boldsymbol{n} < \boldsymbol{l_i} \leq D \quad \boldsymbol{l_s} + s \quad - 1 \wedge$

$\quad \geq \boldsymbol{n} < \quad \wedge I = \mathbb{k} > = \quad \wedge$

$j_{sa} \leq j \quad - 1 \quad - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}, \mathbb{k}_1 \quad , \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$\quad \geq 4 \wedge \boldsymbol{s} \quad s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )} \left(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}}\right) \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1\right)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\left(n_{sa}=\boldsymbol{n}-j^{sa}+1\right)}^{\left(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\right)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - j_{ik})}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)} \sum_{(j_s = \boldsymbol{l_i} + \boldsymbol{n} - D - s + 1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )} \left(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}}\right) \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{\left(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1\right)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}} + s)! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}\ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ \ )}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(\boldsymbol{l_i}$$

$$\frac{(\boldsymbol{l_i})!}{(D+j_$$

$$\sum_{j_i=\boldsymbol{l_i}}^{(\boldsymbol{l_s})}\sum_{-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\quad)}\sum_{j_{ik}+\boldsymbol{l_{sa}}-\quad)}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i$$

$$\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\boldsymbol{l_s})}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}}\sum_{\ =j^{sa}-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(\ +1)\ n_{ik}}\sum_{+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}+j_{ik}-j^{}}^{)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-\ -\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\ -\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}\ 1\wedge\boldsymbol{l_i}\ D+s-\ \wedge$

$1\leq\ \leq j_{ik}-j_{sa}^{ik}+\ \wedge j_s+j_{sa}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}\ ^{ik}\leq j^{sa}\leq\ +j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-\ ^{ik}+1=\ \boldsymbol{sa}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<\ \ I=\mathbb{k}>=0\wedge$

$<j^i\ \ 1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}\colon\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z\colon z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=s+1}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k})} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_s-2)!\cdot(n_i-n_{ik}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1}^{\boldsymbol{l_i}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-n-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=s+1}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa} = j_i + \boldsymbol{l_{sa}} - \boldsymbol{l_i})}^{(\ )} \sum_{j_i = s+1}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i = \boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n}+\mathbb{k}_2 - j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\boldsymbol{l_{sa}}+j_{sa}^{ik}-$$

$$\frac{(\boldsymbol{l_i})!}{\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{1}^{} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{+1}^{\boldsymbol{l_s}+j_{sa}^{ik}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ \ )} \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_i+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}-j_{sa}}^{(\ )}\sum_{(j^{sa}=j_{sa}^{ik}-\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\sum_{j_i=s+1}^{s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ )}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}-1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n+\mathbb{k}}^{n_{is}+ \quad -j_{ik}-\mathbb{k}_1} \sum_{j_{ik}+1}
$$

$$
(n_{ik}+ \quad j^{sa}-\mathbb{k}_2)\ n_{sa}+ \quad j_i
$$

$$
\sum_{n-j^{sa}+ \quad}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is}}{(j_s - 2)\ (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{s - n_{ik}}{(j_{ik} - j_s - 1)\ (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n \quad - n_{sa} - 1)!}{a - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}
$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s+1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}$ $s-j_{sa} \leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} >$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_s$ $-s=\boldsymbol{l_s}$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j^{i}\right.$ $\wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2 \Rightarrow$

$$fz S_{j_s,\,j_{ik},j^{sa},j_i}=\sum_{k=1}^{}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-1)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-1)!\cdot(j^{sa}+j_s-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ )}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}-1}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{j_{ik}=1}^{(\boldsymbol{l_s}+j_{sa}-1)}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{sa}})}^{(\boldsymbol{l_s}+j_{sa}-1)}$$

$$\sum_{j_{ik}=j_{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-1)}\sum_{(j_{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)}\sum_{j_i=j_{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}+j_{sa}-1)}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{is}-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(n_{is}-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(n_{sa}-j_s+1)}\sum_{n_s=n_{sa}+j^{sa}-j_i}^{(n_{sa}-j_s+1)}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{l_i} \leq \boldsymbol{n} \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{sa}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}-j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_i}}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{s}}^{} {}_{\boldsymbol{i}-\boldsymbol{l_{sa}}}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{}^{(n_i-j_{}} \sum_{}^{n_{is}+j_s-} {}_{\mathbb{k}_1}
$$

$$
\sum_{}^{} \sum_{(}^{\mathbb{k}-j_s+1)} \sum_{}^{-\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}
$$

$$
\sum_{}^{} \sum_{}^{+j_{ik}-j} \sum_{}^{+j^{sa}-j_i}
$$

$$
\sum_{(n_{sa}=}^{} \sum_{}^{sa}+1) \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \quad)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(\quad - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

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$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \sum_{n_s=n_{sa}+j^{s}}$$

$$\frac{\left(n_i+\right.}{(}$$

$$\frac{(\boldsymbol{l_s}-2)!}{(}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D}$$

$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i}$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}$$

$$j_{ik} + \quad - j_{sa}^{ik} \leq j^{$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \wedge \boldsymbol{l_{sa}} + \quad - j_{sa} \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D \geq \quad < n \wedge I = \mathbb{k}$$

$$j_{sa} \leq j_{sa}^{i}$$

$$\boldsymbol{s}: \{j_s^s$$

$$s \geq 4 \wedge \boldsymbol{s}$$

$$z = 2$$

$$\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{ik}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_1}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_{sa}-1)!\cdot(n_{is}+j_{sa}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}$ $s-j_{sa} \leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_s$ $-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j^{i}$ $\wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2 \Rightarrow$

$$fz S_{j_s,\,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_{sa}})} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - \cdots)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \cdots)!}{(\boldsymbol{l_s} - j_s)! \cdot (\cdots - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - \cdots)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \cdots)! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \cdots - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik}} \sum_{\boldsymbol{+l_{ik}-l_s}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ \ )} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ \ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\sum_{j_s=2}^{(\boldsymbol{l_s}} \sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(j^{sa}} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\boldsymbol{l_s})} \sum_{(j_s=2}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}\right)}^{(\ )} \sum_{j^{sa}} -\boldsymbol{l_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_i-j_s+1)} \sum_{n_{ik}=} \sum_{j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=} \sum_{j_{ik}-j^{sa}} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i + j_{ik} - j_{} - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{\left(n_i - \mathbb{k}_1 - \mathbb{k}\right)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} \quad 1 \wedge \boldsymbol{l_s} \leq \quad - \boldsymbol{n} \quad 1 \wedge$

$1 \leq j_s \quad j_{ik} - j_{sa}^{ik} + 1 \quad j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \quad \leq j^{sa} \leq \quad + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} \quad + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} \quad \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$\quad \quad t \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-}^{\boldsymbol{l_{ik}}+s-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{\boldsymbol{n}+\mathbb{k}}^{n_{is}+-j_{ik}-\mathbb{k}_1} \sum_{j_{ik}+1}^{}
$$

$$
\sum_{(n_{ik}+} \sum_{j^{sa}-\mathbb{k}_2)}^{} \sum_{n_{sa}+}^{} \sum_{j_i}^{}
$$

$$
\sum_{\boldsymbol{n}-j^{sa}+}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is}}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{{}_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{} - n_{sa} - 1)!}{{}_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{{}_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}
$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{ik}}+s-j_{sa}^{ik}+1}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_{sa}-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{sa}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-\ldots)!}$$

$$\frac{(D-\boldsymbol{l_i}\ldots}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\ldots(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}\ldots s-j_{sa} \leq \ldots \boldsymbol{n}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \ldots \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_s \ldots -s=\boldsymbol{l_s} \ldots \wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \ldots$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa} \ldots \wedge j_{sa}^{s}=j_{sa} \ldots 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \ldots$

$s \geq 4 \wedge \boldsymbol{s}=s+\ldots \wedge$

$\mathbb{k} \cdot z=2 \wedge \ldots=\mathbb{k}_1+\ldots \Rightarrow$

$$fz\mathcal{S}_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{j_{ik}=j_{sa}^{ik}+1}^{(\ )}\sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_s}+s-1}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{n}\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}-j_i}\sum_{n_s=\boldsymbol{n}-j_i+1}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + \boldsymbol{n} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j_{sa}^{ik} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + \boldsymbol{n} - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_s} + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_i + \boldsymbol{l_{sa}} - \boldsymbol{l_i})}^{(\ )} \sum_{j_i = \boldsymbol{l_s} + s}^{\boldsymbol{n}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}$$

$$\frac{(D-}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(}-$$

$$\sum_{(}\sum_{\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_s}\ \sum_{(j^{sa}=j_i+\boldsymbol{l_i}-\boldsymbol{l_{sa}})}^{(\ )}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-1)}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$>\boldsymbol{n}-\ \wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

$$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1\wedge$$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{\boldsymbol{l_s}=1} \sum_{(j_s=j_{i\ldots}\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(\ldots+\boldsymbol{n}+j_{sa}-D\ldots)}^{(\boldsymbol{l_{ik}}+j\ldots j_{sa}^{ik})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{\ldots}
$$

$$
\sum_{n_i=\boldsymbol{n}+\ldots}^{n} \sum_{\ldots=\boldsymbol{n}+\mathbb{k}-\ldots)}^{\ldots-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{\ldots j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{\ldots sa=\boldsymbol{n}-j^{sa}+1)}^{\ldots+j_{ik}-j^{s\ldots}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$(n_{ik}+j_{ik}$$

$$(n_{sa}=$$

$$\frac{(n_i - n_{i}$$

$$\frac{(n_{is}$$

$$\frac{(n_{ik}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\quad)!\cdot(\quad-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}$ $-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j$ $+s-j_{sa} \leq j_i$ $\boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j$ $> \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}$ $j_{sa}-s=$ $\wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}$ $-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>=0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}$ $j_{sa}-1 \wedge j_{sa}^{s}$ $-1 \wedge$

$\boldsymbol{s}$ $\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}$ $_a, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k}$

$\mathbb{k}_z: z=$ $\wedge \mathbb{k}=\mathbb{k}_1+$ $\Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(\quad+j^{sa}-n_s-\quad)!}\cdot$$

$$\frac{(n_s-1)!}{+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\quad)} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - \cdots)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \cdots)!}{(\boldsymbol{l_s} - j_s)! \cdot (\cdots - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - \cdots)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \cdots)! \cdot (j^{sa} + j_s - \cdots - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \cdots - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = j^{sa} + \cdots - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s)}^{(\boldsymbol{l_s} + j_{sa} - 1)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

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$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\epsilon_z S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{\binom{\ }{\ }} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_i}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=\boldsymbol{l_i}+j_{sa}-D-s)}^{(\ +j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=1}^{(\ )}\ \sum_{(j_s=j_{sa}+\boldsymbol{l_s}-\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D}^{\boldsymbol{l_{ik}}}\ \sum_{j_{sa}=j_{ik}+j_{sa}-j_s}^{(\boldsymbol{n}+\quad -s)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n}\ \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}$$

$$\sum_{a=\boldsymbol{n}-j^{sa}+1)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

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$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\mathbb{k}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-\mathbb{k}_1}$$

$$\frac{(n_i+j_{sa}-\mathbb{k}_1-D-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik} \leq 1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+j_{sa}-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 = \boldsymbol{l_{sa}} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \geq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+\boldsymbol{n}-\boldsymbol{n} < \boldsymbol{l_i} \leq D \wedge \boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 1 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge s = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{i}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-} \sum_{=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}}{(j_{ik}-j_s}$$

$$\frac{(n_{ik}}{(j^{sa}-j_{ik}}$$

$$\frac{n_{sa}-n_s}{(j_i-j^{sa}-1)}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\boldsymbol{l_{sa}}+\boldsymbol{l_{sa}}-j_{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{} \sum_{(j_s=2)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{\boldsymbol{n}}\sum_{\boldsymbol{l_{ik}}=(D-s+1)}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}\sum_{(j^{sa}+j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{\boldsymbol{n}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)} \sum_{(j_s = \boldsymbol{l_i} + \boldsymbol{n} - D - s + 1}$$

$$\sum_{j_{ik} = j_s + \boldsymbol{l_{ik}} - \boldsymbol{l_s}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}} \sum_{} - \boldsymbol{l_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_i - j_s + 1)} \sum_{} \sum_{j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = } \sum_{j_{ik} - j^{sa} - } \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j_{ik} - j_{sa} - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq \boldsymbol{n} - n - 1 \wedge$

$1 \leq j_s \wedge j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j \leq j^{sa} \leq + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} \leq \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{} \sum_{(j_s=2)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}^{}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)} \sum_{=\boldsymbol{n}+\mathbb{k}}^{n_{is}-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{j_{ik}+1}^{}
$$

$$
(n_{ik} \quad -j^{sa}-\mathbb{k}_2)\ n_{sa} \quad -j_i
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - \quad)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} \quad 1)!}{(j_{ik} - j_s - 1) \quad (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_i \quad - n_{sa} - 1)!}{{}^{sa} - j_{ik} \quad \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{ - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1}^{} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s})}
$$

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$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is}}$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)}{(j^{sa} - j_{ik} - 1)! \cdot (+ j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{{}_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\quad)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}+1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}+1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\}$

$s \geq 4 \wedge \boldsymbol{s}=s+1 \wedge$

$\mathbb{k}_1 : z=2 \wedge \boldsymbol{z}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_{ik}}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s + n_i - \boldsymbol{n} - 1)!}{(n_s + n_i - \boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (\boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + n_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ \ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa} = j_i + \boldsymbol{l_{sa}} - \boldsymbol{l_i})}^{(\ \ )} \sum_{j_i = \boldsymbol{l_{ik}} + s - j_{sa}^{ik} + 1}^{\boldsymbol{n}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l}_{\boldsymbol{k}}-j_{sa}\right)!}$$

$$\frac{(D-}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(}-$$

$$\sum_{j_{ik}=}\ \sum_{j^{sa}=}^{(\ )}\ \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_{ik}}+s-j_{sa}^{ik}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-1)}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\boldsymbol{n}\ \wedge \boldsymbol{l_s}>1\wedge \boldsymbol{l_s}\le D-\boldsymbol{n}+1\wedge$

$1\le j_s\le j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\le j_i\le \boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

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$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1\ (j_s=j_{ik}} \cdots \boldsymbol{l_{ik}})$$

$$\sum_{j_{ik}=\cdots+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}\cdots \boldsymbol{l_{sa}}-\boldsymbol{l_i})\ j_{\cdots}}^{(\ )} \sum_{\cdots-D-j_{sa}}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\cdots\mathbb{k}-j_s+1)}^{(n_i-j_{\cdots})} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n\cdots-j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}}^{(\ )}\ \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-}^{(n_{ik}+j_{ik}-\mathbb{k}_2)}\ \sum_{\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{-n_{is}-1)!}{(-2)!\cdot(-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{ik}-n_{ik}-1)!}{(-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 \right.}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)} \cdot \frac{\left. - j_s\right)!}{\left(\boldsymbol{n} + j_{ik} - \right.}$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - \ )! \cdot (j_s - 2)!}$$

$$\frac{(D -}{(D + \ \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j^{ik}$ $\leq j_{ik} \leq$ $+ j_{sa}^{ik} - j$ $\wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i$ $_{sa} - s \wedge j^{sa}$ $- j_{sa} - j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik}$ $> \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}$ $j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j$ $- \boldsymbol{n} < \boldsymbol{l_{sa}}$ $D + \boldsymbol{l_s} + j_{sa}$ $-$ $- 1$

D $\boldsymbol{n} < n \wedge$ $= \mathbb{k} >=$ $\wedge$

j_{sa} $j_{sa}^{i} - 1 \wedge j_{sa}^{ik}$ $j_{sa} - 1 \wedge$ $= j_{sa}^{ik} - 1 \wedge$

$\in \{j_{sa}^{s},$ $_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots$ $_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s$ $\mathbb{k} \wedge$

$\mathbb{k}_2$ $= 2$ $\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{\quad - 1)!}{(n_s + \quad - \boldsymbol{n} - 1)$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s}$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}$$

$$\frac{(D$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(\boldsymbol{l_{ik}} + j_{sa} - j_{sa}^{ik})} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

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$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$$

$$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fz\left(j_{ik}, j^{sa}, j_i\right) \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})} \sum$$

$$\sum_{j_{ik} = j_{sa} + 1} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=1}^{(\ \ )}\ \sum_{(j_s=j_{\ \ }-\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\ \ -1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{\ \ }-j_{sa}-s)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\ \ -j_s+1}^{n}\ \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-\ \ -1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1}$$

$$\sum_{a=\boldsymbol{n}-j^{sa}+1)}^{k+j_{ik}-j^{\ \ }-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}} \sum_{-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \sum_{\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{s}}$$

$$\frac{\left(n_i+\right.\ -\mathbb{k}_1-\ -j_{sa}^{ik}\right)!}{\ -\ -\mathbb{k}_1-\ )!\cdot(\ \ -j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\ -j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D\ j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \ \ D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}\ \ 1 \leq j_{ik} \leq \ \ a+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+\ \ -j_{sa}^{ik} \leq j^{\ \ } < j_i+j_{sa}-s \wedge \ \ a-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 \ \ \wedge \boldsymbol{l_{sa}}+\ \ ik-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+\ \ -\boldsymbol{n} < \boldsymbol{l_{sa}} \ \ D+\boldsymbol{l_s}+\ \ -\boldsymbol{n}-1 \wedge$

$\ \ \geq \boldsymbol{n} < \ \ \wedge I=\mathbb{k} >= \ \ \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$\ \ \geq 4 \wedge \boldsymbol{s}\ \ s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_{sa}-1)!\cdot(n_{is}+j_{sa}-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\boldsymbol{l_{sa}}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\boldsymbol{l_{sa}}+1 \quad {}^{ik}_{sa}-D-j_{sa}-1 \quad (\boldsymbol{n}+j_{sa}-s)$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1} \quad \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \quad \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \quad \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \quad \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}$$

$$\frac{(D+\boldsymbol{l_i})!}{(D+j_i+\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\sum_{j_{ik}+j_{sa}^{ik}-D-j_{sa}}^{(\boldsymbol{n}+j_{sa}-s)}\sum_{(j^{sa}+j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{(\ )}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}}}$$

$$\sum_{j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa}}^{\boldsymbol{l_s} + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}}^{(\ )} \sum_{\boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_i}^{(n_i - j_s + 1)} \sum_{n_{ik} = j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = j_{ik} - j^{sa}}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j_{ik} - j_{sa}^{ik} - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik})!}{(n_i - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} \geq 1 \wedge \boldsymbol{l_s} \leq \boldsymbol{n} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \boldsymbol{n} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$I = n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{} \sum_{(j_s=2)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)} \sum_{=\boldsymbol{n}+\mathbb{k}}^{n_{is}-j_{ik}-\mathbb{k}_1} \sum_{j_{ik}+1}
$$

$$
(n_{ik} \quad -j^{sa}-\mathbb{k}_2)\ n_{sa} \quad -j_i
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - \quad)}{(j_s - 2) \quad (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{n_{is} - n_{ik} \quad 1)!}{(j_{ik} - j_s - 1) \quad (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{i} \quad n_{sa} - 1)!}{{}^{sa} - j_{ik} \quad) \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{{}_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1}^{} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_i=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{sa}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ \ )} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-\ldots)!}$$

$$\frac{(D-\boldsymbol{l_i}\ldots}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\ldots(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}\ldots s-j_{sa} \leq \ldots \boldsymbol{n}\ldots$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \ldots \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_s \ldots -s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}\ldots 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}\ldots \wedge j_{sa}^{s}=j_{sa}\ldots 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\}$

$s \geq 4 \wedge \boldsymbol{s}=s+\ldots \wedge$

$\mathbb{k} \cdot z=2 \wedge \ldots=\mathbb{k}_1+\ldots \Rightarrow$

$$fz\boldsymbol{S}_{j_s,\,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{n}+j_{sa}-s)}\sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + \boldsymbol{n} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + \boldsymbol{n} - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s = \boldsymbol{l_{sa}} + \boldsymbol{n} - D - j_{sa} + 1)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik} = j_s + \boldsymbol{l_{ik}} - \boldsymbol{l_s}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\boldsymbol{n} + j_{sa} - s)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{\boldsymbol{l_s}}\sum_{(j_{sa}=j_s+\boldsymbol{l_{ik}}-j_{sa}+1)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\boldsymbol{n}>\boldsymbol{n}-\boldsymbol{l_s}\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\le D+s-\boldsymbol{n}\wedge$$

$$1\le j_s\le j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\le j_i\le\boldsymbol{n}\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}\colon \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z\colon z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{\text{[illegible]}=1} \sum_{(j_s=j_{i\text{[illegible]}}\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ \ )}$$

$$\sum_{\text{[illegible]}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-\text{[illegible]}} \sum_{(j^{sa}=\text{[illegible]}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=s+1}^{\text{[illegible]}k-s}$$

$$\sum_{n_i=\boldsymbol{n}+\text{[illegible]}}^{n} \sum_{\text{[illegible]}_{is}=\boldsymbol{n}+\mathbb{k}-\text{[illegible]}1)}^{\text{[illegible]}-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{\text{[illegible]}j_{ik}-\mathbb{k}_1}$$

$$\sum_{\text{[illegible]}_{sa}=\boldsymbol{n}-j^{sa}+1)}^{\text{[illegible]}+j_{ik}-j^{\text{[illegible]}}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=\boldsymbol{l_{sa}}+j_{sa}^{ik}-s+1}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}\sum_{j_i=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-n_{is}-1)!}{(j_i-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_s-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{ik}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=s+1}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\mathbb{k}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j_{sa}-j_{sa}-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-j_s-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq \boldsymbol{n}+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik} \leq 1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 = \boldsymbol{l_{sa}} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \geq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} \wedge \mathbb{k} = 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}^{s}, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=s+1}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-} \sum_{=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - 1)}{(j_s - 2)\ (n_i - n_{is}\ + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik}\ 1)!}{(j_{ik} - j_s\ 1)\ (n_{is} + j_s\ n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik}\ n_{sa} - 1)!}{(j^{sa} - j_{ik}\ 1)! \cdot (n\ + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a} - n_s\ 1)!}{j_i - j^{sa} - 1)\ (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{{}_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(\boldsymbol{n} + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_s}+s-1} \sum_{j_i=s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\cdots)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-\cdots)!}{(\boldsymbol{l_s}-j_s-\cdots-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\cdots)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\cdots)!\cdot(j^{sa}+j_s-\cdots-j_{ik}-j_{sa})!}$$

$$\frac{(\boldsymbol{l_i}+\cdots-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-\cdots-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\cdots-\boldsymbol{l_i})!}{(D+\cdots-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ \ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\ \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{j_{ik}=1}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)}\sum_{(j^{sa}=j_{sa}+1)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{j_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1\ (j_s=j_{ik}} \cdots \boldsymbol{l_{ik}})
$$

$$
j^{sa}+j_{sa}^{ik}-j_{sa}\ \ (\boldsymbol{l_s}+j_{sa}\cdots) \qquad \sum \cdots \sum_{\boldsymbol{l_i}}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}\cdots} \sum_{(j^{sa}=j_{sa}\cdots+s-j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\cdots\mathbb{k}-j_s+1)}^{(n_i-j_s\cdots)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n\cdots-j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_i}}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=\boldsymbol{l_s}+}^{(\boldsymbol{l_{sa}})}\ \sum^{\boldsymbol{l_i}}\ -j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum^{(n_i-j_s}\ \sum^{n_{is}+j_s-j_{ik}}\ +1)\ n_{i}+\mathbb{k}_2-j_{ik}+1$$

$$\sum^{\ }\ \sum^{\ }\ -j_i$$

$$\sum_{(n_{sa}=\boldsymbol{n}}\ \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-\ )!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_{sa}}$$

$$\frac{(n_i+j_{sa}-\boldsymbol{n}-\mathbb{k}_1-\boldsymbol{l_i}-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_i} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} = 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_s^s, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \ldots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_1}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_{sa}-1)!\cdot(n_{is}+j_{sa}-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\boldsymbol{l_{ik}})!\cdot(\boldsymbol{l_{ik}}-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{l_s}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \cdots, j_{sa}^{i}\right\} \wedge$

s

$\mathbb{k}_z$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\boldsymbol{l_{sa}}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = j_s + \boldsymbol{l_{ik}} - \boldsymbol{l_s}} \sum_{\left(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}\right)}^{(\boldsymbol{l_{sa}})} \sum_{j_i = j^{sa} + s - j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=1}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}}\sum_{+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

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$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_s}+j_{ik}+j_{sa}-j_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{\boldsymbol{n}}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{\boldsymbol{n}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa})}^{(\boldsymbol{l_s})}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{\boldsymbol{n}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s)}^{(\boldsymbol{n}+j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\boldsymbol{n}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{(\boldsymbol{n}+j_{ik}-j_i-\mathbb{k}_1)}\sum_{n_s=n_{sa}+j^{sa}-j_i}^{\boldsymbol{n}}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i+\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}-1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(j_i+j_{sa}-s)} \sum_{\boldsymbol{l_i}=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+s-j_s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-n_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j_i=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_{is}-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

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$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=\boldsymbol{l_{ik}}+s-j_{sa}^{ik}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$(n_{ik}+j_{ik}$$

$$\sum_{(n_{sa}=$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i - n_{ik} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j_{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} < \mathbb{k} >= 1 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j_{sa}^{i} = j_{sa}^{ik}-1 \wedge$

$\mathbb{k}_2 \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s-1 \wedge$

$\mathbb{k}_z, z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_i-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(\boldsymbol{l_{sa}} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s - 1)} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{n}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\cdots)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\cdots)!}{(\boldsymbol{l_s}-j_s)!\cdot(\cdots-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\cdots)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\cdots)!\cdot(j^{sa}+j_{sa}-j_{ik}-j_{sa})!}$$

$$\frac{(\boldsymbol{l_i}+\cdots-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-\cdots-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\cdots-\boldsymbol{l_i})!}{(D+\cdots-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ \ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}\cdots_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l}_{\boldsymbol{k}}-j_{sa}\right)!}$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}$$

$$\frac{(\boldsymbol{l}$$

$$\sum_{}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\sum_{}^{(\boldsymbol{l_{sa}}+j_{sa}-j_{sa}^{ik}+1)}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-\ldots)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\ldots-j_i)!}$$

$$\sum_{j_s=1}^{\ldots}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\ldots}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-\ldots}\ \sum_{(j^{sa}=\boldsymbol{l_i}+\ldots_{sa}-D-s)}\ \sum_{j_i=\ldots+s-j_{sa}}$$

$$\ldots-j_s+1)$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\ldots j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\ldots)$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{\ldots_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \ldots \boldsymbol{n} \ldots \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j \ldots - j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 2 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 \Rightarrow$

$$ {}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}} $$

$$ \sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=n_i-\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot $$

$$ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot $$

$$ \frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot $$

$$ \frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot $$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-1)}\ \sum_{j_{ik}=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}\ \sum_{\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_{sa}}$$

$$\frac{(\boldsymbol{l_s}-n_{is}-1)!}{(\boldsymbol{l_s}-2)!\cdot(\boldsymbol{l_s}-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{ik}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

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$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}-j_{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}-j_{sa})} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{ik}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1\right.}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)}$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-$$

$$\frac{(D-$$

$$\boldsymbol{D \geq n < n \wedge l_s > 1 \wedge l_s \leq D - n + 1 \wedge}$$

$$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s +$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik}$$

$$D +$$

$$D \geq \boldsymbol{n} < n \wedge$$

$$j_{sa}$$

$$\{j_{sa}^{s},$$

$$s \geq 4 \wedge \boldsymbol{s} = s$$

$$\mathbb{k}_2$$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_i-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_s})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\boldsymbol{l_{sa}} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = j_{sa}^{ik}+1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_{sa}})} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{n}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\cdots)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\cdots)!}{(\boldsymbol{l_s}-j_s-\cdots-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\cdots)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\cdots)!\cdot(j^{sa}+j_s-j_{ik}-j_{sa})!}$$

$$\frac{(\boldsymbol{l_i}+\cdots-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-\cdots-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\cdots-\boldsymbol{l_i})!}{(D+\cdots-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ \ )}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+\cdots-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}$$

$$\frac{(D-\boldsymbol{l_i})!}{(\boldsymbol{n}-\boldsymbol{l_i}$$

$$\sum_{}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}}^{j_{sa}^{ik}-1}\ \sum_{(\boldsymbol{n}+j_{sa}^{ik}-$$

$$\sum_{(j_{ik}+j_{sa}-j_{sa}^{ik})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, \ldots} = \sum_{k=1} \sum_{(j_s=2)} \ldots^{(D-s)}$$

$$\sum_{j_{ik} \ldots \boldsymbol{l_{ik}} - \boldsymbol{l_s}} \sum_{(\ldots \boldsymbol{l_{sa}} + \boldsymbol{n} - D)} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{n}}$$

$$\sum_{\ldots - j_s + 1)}^{n} \ldots^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{\ldots \boldsymbol{n} + \mathbb{k}\ (n_{is} = \ldots - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}$$

$$\ldots (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)\ n_{sa} + j^{sa} - j_i$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)} \sum_{n_s = \boldsymbol{n} - j_i + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(l_{sa}+j_{sa}^{ik}+1)}\ \sum_{j_{sa}=j_{ik}+j_{sa}-j_s+1}^{(j_c=\boldsymbol{l_i}+\boldsymbol{n}-s+1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{(\quad)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}-j_{is}+1}^{n}\ \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{(n_{ik}-1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{sa}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{sa}+j^{sa}-j_i}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{(\quad)}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -$$

$$\sum_{k=1}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum^{(\ )}_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum^{(n_i-j_s+1)}_{(n_{is}=\boldsymbol{n}+\mathbb{k}-} \sum_{n_{ik}=n_{is}+j_s} \sum_{\mathbb{k}_1}$$

$$\sum^{(\ )}_{(n_{sa}=n_{i}-j^{sa}} \sum_{+j^{sa}-j_i}$$

$$\frac{\left(n_i+\ -j_i-\ -\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > \ \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik} \leq j_{sa}^{ik}+1 \wedge j^{sa}+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}-j_{sa}+j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-j_{sa}^{ik} \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}-j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \ \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D-\boldsymbol{n} \ \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}- \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{} \sum_{(j_s=2)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}
$$

$$
(n_{ik}+j_{ik}-\mathbb{k}_2)\ n_{sa}=\boldsymbol{n}+\mathbb{k}_2-j^{sa}-j_i
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_2-j^{sa}+1)}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i-1)!}{(j_s-2)!\cdot(n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s+1)!\cdot(n_{ik}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=1}^{} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s})}
$$

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$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_1}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_{sa}-1)!\cdot(n_{is}+j_{sa}-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\quad)!\cdot(\quad-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}$ $_{a}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j$ $+s-j_{sa} \leq j_i$ $\boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j$ $= \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}$ $j_{sa}-s =$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1$ $_{a}^{s} = j_{sa}^{ik}-1$

$\boldsymbol{s}$: $\left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \ldots \cdots, j_{sa}^{i}\right\} \wedge$

s $4 \wedge \boldsymbol{s} =$ $\mathbb{k} \wedge$

$\mathbb{k}_z$ $= 2 \wedge \mathbb{k} = \mathbb{k}$ $+ \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{}\ \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\ \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\ \sum_{j_i=s+1}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\quad)} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_i}} \sum_{j_i=\boldsymbol{l_s}+s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-}{(\boldsymbol{l_s}-j_s)}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_s+1)!}{(j_s+\boldsymbol{l_{ik}}-}\cdot(j_{ik}-\quad-j_{sa}^{ik}+1)!$$

$$\frac{(D-\boldsymbol{l_i})}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\sum_{j_i=s+1}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

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$1 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j_{\dots} = \sum_{\dots=1}^{(j_{ik}-j_{sa}^{ik}+} \sum_{j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{(j_{sa}-1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}}^{(\boldsymbol{l_{sa}})}\sum_{j^{sa}\ldots-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{\ldots+1)}^{(n_i-j_s\ldots}\sum_{n_{i\ldots}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}\ldots}$$

$$\sum_{(n_{sa}=\boldsymbol{n}\ldots+1)}^{(\ldots+j_{ik}-j^{sa}\ldots}\sum_{n_s=\boldsymbol{n}-j_i+1}^{\ldots j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-\ldots)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(\ldots_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(\ldots^{a}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}} -j_{ik}-\mathbb{k}_1$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-}^{(\ )} \sum_{\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^s}$$

$$\frac{\left(n_i + \right. \mathbb{k}_1 - \left. - j_{sa}^{ik}\right)!}{(- \mathbb{k}_1 -)! \cdot (\boldsymbol{n} - j_{sa}^{ik})!} \cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(- j_s)! \cdot (j_s-2)!} \cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D - j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + - j_{sa}^{ik} \leq j^{ } \leq j_i + j_{sa} - s \wedge a - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \wedge \boldsymbol{l_{sa}} + ik - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq < n \wedge I = \mathbb{k} = 0 \wedge$

$a \leq j_{sa}^{i} 1 \wedge j_{sa}^{ik} = j_s - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_s^s \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_1 , j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} s + \mathbb{k} \wedge$

$\cdot z = 2 \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{i}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-} \sum_{=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}}{(j_{ik}-j_s}$$

$$\frac{(n_{ik}}{(j^{sa}-j_{ik}}$$

$$\frac{(n_{sa}-n_s}{(j_i-j^{sa}-1)}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{k=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{(D-$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{(j_s=2)}^{(\boldsymbol{l_s}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{(n_i-$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ )}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\ )}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$> \boldsymbol{n} - \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$$

$$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$$

$$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{\quad} \sum_{=2)}^{\quad} \left(\quad\right) \quad 1
$$

$$
\sum_{j_{ik}=j^{sa}}^{\quad} \sum_{(j^{sa}=j_i+\quad}^{\quad} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\quad}
$$

$$
\sum_{\quad}^{n} \sum_{\quad}^{\quad} \sum_{\quad}^{j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{\quad} \sum_{=\boldsymbol{n}+\mathbb{k}-\quad}^{\quad} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{\quad}
$$

$$
\sum_{\quad}^{\quad} \sum_{\quad}^{\quad}
$$

$$
\sum_{a=\boldsymbol{n}-j^{sa}+1)}^{\quad} \sum_{n_s=\boldsymbol{n}-j_i+1}^{\quad}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2}$$

$$\sum_{(n_{sa}=j_i+j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_s-1)!}{(j_s-2)!\cdot(n_i-n_s-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\ )!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\ -\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}\ -j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j\ +s-j_{sa} \leq j_i\ \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{\ } = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}\ j_{sa}-s = \ \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}\ -\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}\ j_{sa}-1 \wedge j_{sa}^{s}\ _{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\ \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}\ _{sa}, j_{sa}, \ldots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k}$

$\mathbb{k}_z : z = \ \wedge \mathbb{k} = \mathbb{k}_1+\ \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{}\ \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\ \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-1)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_{sa}})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\cdots)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\cdots)!}{(\boldsymbol{l_s}-j_s)!\cdot(\cdots-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}+1)!}{(j_s+\boldsymbol{l_{ik}}-\cdots)!\cdot(j_{ik}-\cdots-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\cdots-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}\cdots-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}+j_{sa}-1)}\ \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

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$1 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \le D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s, j_{sa}^{ik}, j_{sa}, j_{sa}^{sa}, j_i} = \sum_{k=1}^{\left(j_{ik} - j_{sa}^{ik} + 1\right)} \sum_{(j_s=2)}^{\quad}
$$

$$
\sum_{=\boldsymbol{l_i}+\boldsymbol{n}+\mathbb{k}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum^{(\quad)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

$$
\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{\boldsymbol{n}}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{ik}}^{\boldsymbol{n}+j_{sa}^{ik}-s}\sum_{j_{sa}=j_{ik}+\boldsymbol{l_{sa}}-j_{ik}}^{(\boldsymbol{l_s})}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}_1}^{n}\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{is}-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+}^{} \sum_{-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}+)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}^{}$$

$$\frac{(n_i+j_{}-\mathbb{k}_{}-\mathbb{k}_{}-j_{sa}^{ik})!}{(n_i-\mathbb{k}_1-)!\cdot(\boldsymbol{n}+j_{}-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq -\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_i + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + - \boldsymbol{n} < \boldsymbol{l_i} \leq D - \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < \wedge I = \mathbb{k} >= \wedge$

$j_{sa} \leq - 1 \wedge j_{sa} - j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$4 \wedge - s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-} \sum_{=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - 1)}{(j_s - 2)\ (n_i - n_{is}\ + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik}\ 1)!}{(j_{ik} - j_s\ 1)\ (n_{is} + j_s\ n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik}\ n_{sa} - 1)!}{(j^{sa} - j_{ik}\ 1)! \cdot (n\ + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a} - n_s\ 1)!}{j_i - j^{sa} - 1)\ (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(\boldsymbol{l_s})} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ \ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{}$$

$$\frac{(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik})!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$f_z S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_s}+s-1} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{[illegible]1}^{[illegible]}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{[illegible]}\sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\sum_{j_i=\boldsymbol{l_{sa}}+s-j_{sa}}^{\boldsymbol{l_s}-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_i=\boldsymbol{n}+\mathbb{k}+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{sa}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{sa}+j_{ik}-j^{sa}-1)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_s-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}\geq 1\wedge\boldsymbol{l_s}\leq\boldsymbol{n}-\boldsymbol{n}-1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}+j_{sa}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1\wedge$

$I=\mathbb{k}\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq 4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_{ik}-\mathbb{k}_1}^{j_{ik}+1}
$$

$$
(n_{ik}+ \quad -j^{sa}-\mathbb{k}_2)\ n_{sa}+ \quad -j_i
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is}}{(j_s-2)\ (n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{{}_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)\ (n_{is}+j_s-n_{ik}-j_{ik})!}\cdot
$$

$$
\frac{(n_{sa}-n_{sa}-1)!}{{}_{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{{}_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=1}^{(\boldsymbol{l_s})} \sum_{(j_s=2)}
$$

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$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i - 1)}{(j_s - 2) \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ \ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-\ldots)!}$$

$$\frac{(D-\boldsymbol{l_i}\ldots}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\ldots(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}\ldots s-j_{sa} \leq \ldots \boldsymbol{n}\ldots$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \ldots \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_s\ldots-s=\boldsymbol{l_{sa}}\ldots$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}\ldots 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}\ldots \wedge j_{sa}^{s}=j_{sa}\ldots 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\}\ldots$

$s \geq 4 \wedge \boldsymbol{s} = s+\ldots \wedge$

$\mathbb{k} \cdot z = 2 \wedge \ldots = \mathbb{k}_1+\ldots \Rightarrow$

$$fz\boldsymbol{S}_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{\quad - 1)!}{(n_s + \quad - \boldsymbol{n} - 1)$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s}$$

$$\frac{(\boldsymbol{l_{ik}}$$

$$\frac{(D$$

$$\sum_{k=1}^{}$$

$$\sum_{j_{ik}=}$$

$$\sum_{n_i=}$$

$$\sum_{(n_{sa}=}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}}\sum_{\boldsymbol{l_s}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-\boldsymbol{n}+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\boldsymbol{l_s}>1\wedge\boldsymbol{l_s}\le D-\boldsymbol{n}+1\wedge$

$1\le j_s\le j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\le j_i\le\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

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$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(\boldsymbol{l_{sa}} + \cdots D - j_{sa})} \cdots$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{\cdots}-D-j_{sa}}^{\boldsymbol{n}+j_{sa}^{ik}-s} \cdots \sum_{\cdots}^{(\ )} \cdots \sum_{\cdots}^{\cdots + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\cdots \mathbb{k} - j_s + 1)}^{(n_i - j_{\cdots})} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2 - j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{\cdots} - j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{n}+j_{sa}^{ik}-s}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}\sum_{\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_s-n_{is}-1)!}{(j_s-2)!\cdot(n_s-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{is}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{ik}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}\sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{(\boldsymbol{l_s})}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\left(\boldsymbol{n}+j_{ik}-\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-}{(D+\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j^{ik}_{sa}-1 \leq j_{ik} \leq j_{sa}+j_{sa}^{ik}-j_s \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}-j_{sa}-j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-1=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}-j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j^{ik}-\boldsymbol{n} < \boldsymbol{l_{ik}} \leq D+\boldsymbol{l_s}+j_{sa}^{ik}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge \mathbb{k} >= \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge = j_{sa}^{ik}-1 \wedge$

$\{j_{sa}^{s}, \mathbb{k}, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s \wedge$

$\mathbb{k}_2 \geq 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})} \sum_{j_i=\boldsymbol{l_{ik}}+s+\boldsymbol{n}-D-j_{sa}^{ik}}^{\boldsymbol{l_s}+s-1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{sa} + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ \ )} \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{1)!}{(n_s + \quad - \boldsymbol{n} - 1)$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s}$$

$$\frac{(\boldsymbol{l_{ik}}$$

$$\frac{(D$$

$$\frac{(D + \boldsymbol{l_i})!}{(D + \quad - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{(j^{sa} = j_i + \boldsymbol{l_{sa}} - \boldsymbol{l_i})}^{(\ )} \sum_{j_i = \boldsymbol{l_{ik}} + s + \boldsymbol{n} - D - j_{sa}^{ik}}^{\boldsymbol{l_s} + s - 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{2}[\ldots, j_{ik}, j^{sa}, j_{sa}] = \sum_{j_{ik}=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{sa}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{(\boldsymbol{l_s})}\sum_{(j_s}$$

$$\sum_{j_{ik}=}\sum_{(\boldsymbol{n}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\sum_{(n_{sa}=\boldsymbol{l_s}+j_{sa})}\sum_{j_i-}\boldsymbol{l_i}-\boldsymbol{l_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=}\sum_{(n_i-j_s+}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_i+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -$$

$$\sum_{k=1}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\ \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{l_s}+j_{sa}-1)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_{is}+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}+1)}^{(\ )}\ \sum_{n_{sa}=n_{ik}+j^{sa}-j_i}$$

$$\frac{(n_i+\mathbb{k}_1-j_i-\mathbb{k}_2-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}-j_{ik}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j_{ik} \leq j_i+j_{sa}-1 \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}^{ik}-\boldsymbol{n}-\boldsymbol{l_{ik}} \leq D-\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}}^{(n_{ik}+j_{ik}-} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (\quad j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} \quad n_{ik} - 1)!}{(j_{ik} - j_s \quad 1)! \cdot (n_{is} \quad j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} \quad n_{sa} - 1)!}{(j^{sa} \quad j_{ik} - 1)! \quad n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{\quad - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1}^{(\boldsymbol{l_s})} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s - \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_{ik}} + \boldsymbol{n} - D - j_{sa}^{ik})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ \ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-$$

$$\frac{(\boldsymbol{l_s}-j_s-$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_s+1)!}{(j_s+\boldsymbol{l_{ik}}-$$

$$\frac{(D-\boldsymbol{l_i}$$

$$\frac{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{\kappa=1}^{}\ \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_i}^{\boldsymbol{n}+j_{sa}^{ik}-s}\ \sum_{j_s+j_{sa}^{ik}-1}^{(\ \ )}\ (j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{\boldsymbol{n}}\sum_{\boldsymbol{l_{ik}}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{sa}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\boldsymbol{n})}\sum_{j_i=j_{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+j_s+1)}^{(\boldsymbol{n}-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\boldsymbol{n})}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{sa}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(j_i+j_{sa}\ \ \boldsymbol{l_s}+s-1} \sum_{+1)}^{} \sum_{=s+1}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{\mathbb{k}-j_s+1)}^{(n_i-} \sum_{=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-}
$$

$$
\sum_{(n_{sa}=}^{+j_{ik}-} \sum_{s}^{j^{sa}-j_i}
$$

$$
\sum_{(n_{sa}=}^{sa}+1) \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s -)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j_i - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \left(j^{sa}=j_i+j_{sa}-s\right) \sum_{j_i=s+1}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \left(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1\right) \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} n_s=\sum_{}^{} +j^{sa}-j_i$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1 \quad -j_s\right)!}{\left(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2\right) \quad \left(\boldsymbol{n}+j_{ik} \quad j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s} \quad)! \cdot (j_s-2)!}$$

$$\frac{(D \quad }{(D+j \quad -\boldsymbol{n}-\boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik} \quad \leq j_{ik} \leq \quad a+j_{sa}^{ik}-j \quad \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i \quad sa-s \wedge j^{sa} \quad -j_{sa}-j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik} \quad =\boldsymbol{l_{ik}} \wedge \boldsymbol{l} \quad j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \quad >= 0 \wedge$

$j \quad \leq j_{sa}^{i}-1 \quad _{sa}^{ik}=j_{sa} \quad 1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{ \quad , \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_s \cdots, j_{sa}^{i}\}$

$\geq 4 \wedge \quad =s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k} \quad \mathbb{k} \quad _2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{} \left(j^{sa}=j_{sa}+1\right) \sum_{j_i=j^{sa}+s-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum^{\boldsymbol{l_i}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_i-1)!\cdot(n_{sa}+j_i-j_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_{sa}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s-\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\boldsymbol{l_s})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{sa}})} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{\boldsymbol{l_i}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_{sa}})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ \ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_s} + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + \boldsymbol{l_{sa}} - \boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j^{sa}-s)!\cdot(j_i+j^{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{k=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ \ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{(j_{ik}=j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}-1}\ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{(n_i-\ \ 1)}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\boldsymbol{\ldots\wedge l_s>1\wedge l_i\le D+s-n\wedge}$$

$$1\le j_s\le j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\le j_i\le\boldsymbol{n}\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=\cdots}^{\cdots} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\cdots}^{\cdots} \sum_{j_i=j^{sa}+s-j_{sa}}^{\cdots}
$$

$$
\sum_{\cdots=\cdots-j_s+\cdots}^{n} \sum_{\cdots=\cdots}^{\cdots} \sum_{\cdots=\cdots-j_{ik}-\mathbb{k}_1}^{\cdots}
$$

$$
\sum_{n_i=\boldsymbol{n}+\cdots}^{n} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-\cdots+1)}^{\cdots} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{\cdots}
$$

$$
\sum_{\cdots=\cdots+j_{ik}-j^{\cdots}-\mathbb{k}_2)}^{\cdots} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{\cdots} \sum_{n_s=\boldsymbol{n}-j_i+1}^{\cdots}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )}\sum_{}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\sum_{}^{}$$

$$\sum_{(n_{sa}=}^{(\ )}\sum_{}^{}$$

$$\frac{\left(n_i-j_{ik}-j_i-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\quad+j_{ik}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_{ik}+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j_{ik}\leq j_i+j_{sa}-1\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}-j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D+s-\boldsymbol{n}<\quad\leq D+\quad+s-\boldsymbol{n}-1\wedge$

$D>\boldsymbol{l}\quad\wedge I=\mathbb{k}>=0\wedge$

$j_{sa}\leq j_{sa}^{i}-\quad\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s\geq 4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{l_s}+s-1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}
$$

$$
\sum_{(n_{sa}=}^{(n_{ik}+j_{ik}} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}-j_i}
$$

$$
\frac{(n_i - n_{i} - 1)!}{(j_s - 2)! \cdot (n_{i} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1}^{} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}
$$

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$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{sa}})} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_s}+s}^{n}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}-\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_s}+s-1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\ )!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\ -\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}\ _{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j\ +s-j_{sa} \leq j_i\ \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{\ } = \boldsymbol{l_{ik}} \wedge \boldsymbol{l}_{\ }-j_{sa}-s > \ \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}\ -\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}\ -j_{sa}-1 \wedge j_{sa}^{s}\ _{sa}^{ik}-1 \wedge$

$\boldsymbol{s} \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}\ _{sa}, j_{sa}, \cdots\ _{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k}$

$\mathbb{k}_z : z = \ \wedge \mathbb{k} = \mathbb{k}_1+\ \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_{sa}})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{\boldsymbol{n}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{}{(n_s +$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s}$$

$$\frac{(\boldsymbol{l_{ik}}$$

$$\frac{(\boldsymbol{l_i}$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}-j_{sa}+1)!\cdot(j_{ik}-j_s-$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)}\sum_{j_{ik}=j^{sa}}^{\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}\sum_{j_i=j^{sa}+s-j_{sa}}^{n}\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

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$1 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \le D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-} \sum_{(\quad=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{(j_{ik}=2)}\sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-\boldsymbol{l_s}-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}}^{(\ )} \sum_{j_i=j^{sa}-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{(n_i-j_s+1)}^{(n_i-j_s} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+j_{ik}-j^{sa}+1)}^{+j_{ik}-j^{sa}} \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - \ )! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+}^{} \sum_{-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}+s)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}^{}$$

$$\frac{(n_i+j_{sa}^{ik}-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j_{sa}^{ik}-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq \ - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq \ a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \ j_i + j_{sa} - s \wedge j \ s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \ \wedge \boldsymbol{l_{sa}} + \ - j_{sa} \ \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + \ - \boldsymbol{n} < \boldsymbol{l_i} \leq D \ \boldsymbol{l_s} + s - \ - 1 \wedge$

$D \geq \boldsymbol{n} < \ \wedge I = \mathbb{k} > = \ \wedge$

$j_{sa} \leq \ - 1 \wedge j_{sa} \ j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, \ \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$4 \wedge \ - s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i - 1)}{(j_s - 2) \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - 1) \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(\boldsymbol{l_s})} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j_i-j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_{sa}+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s-\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\boldsymbol{l_s})} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ \ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j^{i}\right.$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=s+1}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\quad)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-\quad)!}{(\boldsymbol{l_s}-j_s-\quad-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_s-\quad+1)!}{(j_s+\boldsymbol{l_{ik}}-\quad)!\cdot(j_{ik}-\quad-j_{sa}^{ik}+1)!}$$

$$\frac{\quad+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\quad+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\quad-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\ \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ \ )}\ \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{}\sum$$

$$\sum_{j_{ik}=j_{sa}-j_{sa}}^{}\ \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\ \sum_{j_i=s+1}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{(j_{sa}+j_{sa}^{ik}+1)} \sum_{(j_s=\ldots)}^{\ldots} $$

$$ \sum_{j_{ik}=j_{sa}^{ik}+\ldots}^{j^{sa}+j_{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+\ldots)}^{(\boldsymbol{l_s}+j_{sa}\ldots)} \sum_{\ldots \boldsymbol{l_i}-\boldsymbol{l_{sa}}} $$

$$ \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\ldots\mathbb{k}-j_s+1)}^{(n_i-j_s\ldots)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} $$

$$ \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(\ldots+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} $$

$$ \frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot $$

$$ \frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot $$

$$ \frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot $$

$$ \frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot $$

$$ \frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot $$

$$ \frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot $$

$$ \frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot $$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{} \sum_{(j_s=}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{s}}^{(\boldsymbol{l_{sa}})} \sum_{j^{sa}}^{} - \boldsymbol{l_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{=\boldsymbol{n}}^{(n_i-j_s+} \sum_{n_{ik}}^{n_{is}+j_s-j_{ik}} +\mathbb{k}_2-j_{ik}+1$$

$$\sum_{(n_{sa}=\boldsymbol{n}-}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s -)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{ik} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{sa} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-}$$

$$\frac{\left(n_i+j_{sa}-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq$ $+ s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik}$ $1 \leq j_{ik} \leq$ $^{a} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} +$ $- j_{sa}^{ik} \leq j^{s}$ $j_i + j_{sa} - s \wedge$ $- j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 >$ $\wedge \boldsymbol{l_{sa}} +$ $^{ik} - j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq$ $< n \wedge I = \mathbb{k}$ $0 \wedge$

$j_{sa} \leq j_{sa}^{i}$ $1 \wedge j_{sa}^{ik} = j_s$ $- 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}$: $\{j_s^{s}$ $_1, j_{sa}^{ik}, \mathbb{k}_2$ $\cdot, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s}$ $+ \mathbb{k} \wedge$

$z = 2$ $\mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j^{i}\right.$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$ $+\mathbb{k}_2 \Rightarrow$

$$fz\boldsymbol{S}_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_s})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\quad)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-\quad)!}{(\boldsymbol{l_s}-j_s)!\cdot(\quad-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}+1)!}{(j_s+\boldsymbol{l_{ik}}-\quad)!\cdot(j_{ik}-\quad-j_{sa}^{ik}+1)!}$$

$$\frac{\quad+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\quad+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\quad-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j_{2\ldots,j_{ik},j^{sa},\ldots} = \sum_{t=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{} \sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\right.}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\right.-j_{sa})!}$$

$$\frac{(D-$$

$$\frac{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{l}-j_i)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{l}-j_i)!}+$$

$$\sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+}^{\boldsymbol{l_{ik}}}\ \sum_{D\ (j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\ \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{is}+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{\boldsymbol{l_s}=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}-\boldsymbol{l_s}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i+j_{ik}+1)} \sum_{(n_i=\boldsymbol{n}+\mathbb{k}-j_s+j_{ik}-\mathbb{k}_1)}^{(\ )} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )}$$

$$\sum_{(n_{sa}=n_{is}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\ )}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i + \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa} - 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$j_{sa} - j_{sa}^{ik} - 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-1)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_{ik}=j^{sa}-\boldsymbol{l_{sa}}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}_1}^{n} \sum_{(n_{is}=\mathbb{k}_1-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}+\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j_{sa}+1)}^{n_{ik}+j_{ik}-j_{sa}} \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1\right.}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)}$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-$$

$$\frac{(D-$$

$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$$

$$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j^{ik}$$

$$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}$$

$$D+s$$

$$D$$

$$j_{sa}$$

$$\cdots\{j_{sa}^{s},$$

$$s \geq 4 \wedge \boldsymbol{s} = s$$

$$\mathbb{k}_2$$

$$f_z S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s + \boldsymbol{n} - 1)!}{(n_s + \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_s - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_s} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s}^{\boldsymbol{l_s} + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik})!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{k} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-$$

$$(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot($$

$$\frac{(D-$$

$$+j_$$

$$\sum_{k=}\ \sum_{j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{=j_s+j_{sa}}^{\boldsymbol{l_{ik}}}\ \sum_{=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(j_{sa}-s)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=1}^{(\boldsymbol{l_s}-2)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1}$$

$$\sum_{j_{ik}=j_s+j_{sa}-1}^{(\quad)}\sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \quad \boldsymbol{n} < \quad \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j \quad -j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \left(\sum_{j^{sa}=j_i+\boldsymbol{l_{sa}}}^{(\ \ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D}^{\boldsymbol{l_s}+s}\right.
$$

$$
\sum_{n_{ik}+\mathbb{k}\ (n_{is}-\mathbb{k}-j_s+1)\ n_{ik}}^{n} \sum_{(n_i-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{j_{ik}+1}
$$

$$
\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+} \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{\quad - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{ik - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}}\ \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\ )}^{(\ )}\ \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}_{\ }j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_{ik}-\mathbb{k}_1}^{n_{is}+j_{\ }j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=}^{(n_{ik}+j_{ik}\ \ -\mathbb{k}_2)}\ \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(\ -n_{is}-1)!}{-2)!\cdot\ -n_{is}-j_s+1)!}\cdot$$

$$\frac{(\ -n_{ik}-1)!}{-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{-n_{sa}-1)!}{(\ -j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum n_s=n_{sa}+j^{sa}$$

$$\frac{(n_i+ \quad -\mathbb{k}_1-\mathbb{k}-j_{sa}^{ik})!}{(n_i- \quad -\mathbb{k}_1- \quad)!\cdot(\boldsymbol{n}- \quad -j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D- \quad j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq \quad -\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik} \quad 1 \leq j_{ik} \leq \quad a+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+ \quad -j_{sa}^{ik} \leq j^{s} \quad j_i+j_{sa}-s \wedge \quad -j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \quad \wedge \boldsymbol{l_{sa}}+ \quad -j_{sa} \quad \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+ \quad -\boldsymbol{n} < \boldsymbol{l_{sa}} \leq \quad +\boldsymbol{l_s}+ \quad -\boldsymbol{n}-1 \wedge$

$\quad \geq \boldsymbol{n} < \quad \wedge I=\mathbb{k} >= \quad \wedge$

$j_{sa} \leq j \quad -1 \wedge j \quad sa-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, \quad \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$\quad > 4 \wedge \quad s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{\boldsymbol{n}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-1}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-\ldots)!}$$

$$\frac{(D-\boldsymbol{l_i}\ldots}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\ldots(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}\ldots s-j_{sa} \leq \ldots \boldsymbol{n}\ldots$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \ldots \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_s\ldots-s=\boldsymbol{l_s}\ldots\wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}\ldots 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}\ldots\wedge j_{sa}^{s}=j_{sa}\ldots 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\}$

$s \geq 4 \wedge \boldsymbol{s}=s+\ldots\wedge$

$\mathbb{k}\cdot z=2 \wedge \ldots=\mathbb{k}_1+\ldots \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{n}+j_{sa}-s)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{}{(n_s +$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s}$$

$$\frac{(\boldsymbol{l_{ik}}$$

$$\frac{(\boldsymbol{l_{sa}} + j_s$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa}}^{\boldsymbol{l_s} + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\boldsymbol{n} + j_{sa} - s)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\cdots)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-\cdots)!}{(\boldsymbol{l_s}-j_s)!\cdot(\cdots-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}\cdots+1)!}{(j_s+\boldsymbol{l_{ik}}-\cdots)!\cdot(j_{ik}-\cdots-j_{sa}^{ik}+1)!}$$

$$\frac{\cdots+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\cdots+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\cdots-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik})!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{}\sum$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{[illegible]} \sum_{(j_s=2)}^{([illegible]-j_{sa})}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}[illegible]-D}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=[illegible]+\boldsymbol{n}-D)}^{([illegible]s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

$$
\sum_{[illegible]\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=[illegible]-j_s+1)}^{([illegible]-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{k=1}^{\boldsymbol{l_{ik}}} \sum_{\boldsymbol{l_{sa}}+\boldsymbol{n}-\boldsymbol{l_i}-j_{sa}+1)}^{(\boldsymbol{n}-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{j_{ik}+j_{sa}-j_{sa}}^{(\boldsymbol{n}-j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}_1}^{n} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{is}-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{sa}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik})!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\boldsymbol{l_s})}\sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}}\sum_{j^{sa}}-\boldsymbol{l_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_i-j_s+1)}\sum_{n_{ik}=}\sum_{j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=}\sum_{j_{ik}-j^{sa}}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_{}-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\mathbb{k}_1-\mathbb{k}_{}!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}$ $1\wedge\boldsymbol{l_i}\leq$ $+s$ $\wedge$

$1\leq j_s<j_{ik}-j_{sa}^{ik}+1$ $j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{}^{ik}\leq j^{sa}\leq$ $+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}$ $+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n$ $I=\mathbb{k}>=0\wedge$

$j_{}$ $-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s\geq4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=s}^{\boldsymbol{l_i}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}
$$

$$
\sum_{n_{sa}=\boldsymbol{n}+\mathbb{k}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot(j^{sa}-j_{sa})!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -
$$

$$
\sum_{k=1} \sum_{(j_s=1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}
$$

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$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}$ $\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}=j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_{sa}}+s-j_{sa}} \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot(j^{sa}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s}$$

$$\sum_{j_{ik}=j_{sa}^{ik}(}\sum_{j_i=s}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$\geq \boldsymbol{n} < \wedge \boldsymbol{l_s} = 1 \wedge \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_{ik} - \quad \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad {}_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} \quad = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\boldsymbol{l_i}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-\boldsymbol{n}-\mathbb{k}_1+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}-j^{sa}+\mathbb{k}_2}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{sa} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot (j^{sa} - j_{sa})!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=1} \sum_{(j_s=1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}
$$

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$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa}$ $\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\boldsymbol{l_{sa}})} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot(j^{sa}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s}$$

$$\sum_{j_{ik}=j_{sa}^{ik}(\ )}\sum_{j_i=s}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\ \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$\geq \boldsymbol{n} < \wedge \boldsymbol{l_s} = 1 \wedge \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j \leq j_{ik} - \quad \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad {}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} \quad > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=1)}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_i}} \sum_{j_i=}
$$

$$
\sum_{(n_i-\ \ -\mathbb{k}_1+1)}^{n}
$$

$$
\sum_{n_i=\boldsymbol{n}}^{} \sum_{=\boldsymbol{n}+\mathbb{k}\ j_{ik}+1)}
$$

$$
n_{ik}+\ \ j^{sa}-\mathbb{k}_2\ (n_{sa}+\ \ j_i)
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+\ \ }^{} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{}
$$

$$
\frac{(n_i - n_{ik}}{j_{ik} - 2)!\ (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(\ \ - n_{sa} - 1)!}{a} - j_{ik} - 1)!\ (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{\ } - n_s - 1)!}{(j_i - j^{\ \ } - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik})! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s=1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}
$$

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$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}$ $\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_{sa}}+s-j_{sa}} \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik})! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s}$$

$$\sum_{j_{ik}=j_{sa}^{ik}(\ )} \sum_{j_i=s}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik})!}{i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$\geq \boldsymbol{n} < \wedge \boldsymbol{l_s} = 1 \wedge \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j \leq j_{ik} - \quad \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad {}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=s}^{\boldsymbol{l_{ik}}+s-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-\mathbb{k}_1+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}-j^{sa}+\mathbb{k}}^{n_{ik}+j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(n_{sa} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik})! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=1} \sum_{(j_s=1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}
$$

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$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} \quad \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_i}+j_{sa}-s)} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik})!\cdot\left(j_{ik}-\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(-j_i)!}$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s}$$

$$\sum_{j_{ik}=j_{sa}^{ik}(}^{(\ )}\sum_{j_i=s}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\ \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$\geq \boldsymbol{n} < \wedge \boldsymbol{l_s}=1 \wedge \leq D+s-\boldsymbol{n} \wedge$

$1 \leq \leq j_{ik} - \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad {}_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} \quad > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

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$$

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\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{sa}})} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}
$$

$$
\sum_{n_{ik}+j^{sa}-\mathbb{k}_2}^{=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)} \sum_{(n_{sa}+j^{sa}-j_i)}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+1)}^{} \sum_{(n_s=\boldsymbol{n}-j_i+1)}
$$

$$
\frac{(n_i - n_{ik}}{j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(\quad - n_{sa} \quad 1)!}{a} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{\quad} - n_s - 1)!}{(j_i - j^{\quad} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik})! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s=1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}
$$

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$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}$ $\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

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$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik})!\cdot\left(j_{ik}-\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(-j_i)!}$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s}$$

$$\sum_{j_{ik}=j_{sa}^{ik}(}\sum_{j_i=s}^{(\ )}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

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$D \geq \boldsymbol{n} < \wedge \boldsymbol{l_s} = 1 \wedge \leq D+s-\boldsymbol{n} \wedge$

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$j_{ik} + j_{sa} \quad {}^{ik}_{a} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} \quad > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

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$$

$$
\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_i}+j_{sa}^{ik}-s} \ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}
$$

$$
n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \ (n_{sa}+j^{sa}-j_i)
$$

$$
\sum_{n-j^{sa}+1}^{} \ \sum_{(n_s=\boldsymbol{n}-j_i+1)}
$$

$$
\frac{(n_i - n_{ik}}{k} - 2)! \cdot n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(\quad - n_{sa} \quad 1)!}{(\quad a - j_{ik} - 1)! \cdot n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(\quad a - n_s - 1)!}{(j_i - j^{s} \quad 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik})! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s=1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \ \sum_{(j^{sa}=j_{sa})}^{(\ )} \ \sum_{j_i=s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}
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$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} \quad \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}
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$$
n_{ik}+j^{sa}-\mathbb{k}_2 \ (n_{sa}+j_i)
$$

$$
\sum_{\boldsymbol{n}-j^{sa}+1} \sum_{(n_s=\boldsymbol{n}-j_i+1)}
$$

$$
\frac{(n_i - n_{ik}}{\ldots - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(\ldots - n_{sa} \ldots 1)!}{\ldots a} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

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\frac{(\ldots - n_s - 1)!}{(j_i - j \ldots 1)! \cdot (n_{sa} + 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}} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik})! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot
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$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

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\sum_{k=1}^{(\ )} \sum_{(j_s=1)}
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\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)}^{(\ )}
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$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{sa}})} \sum_{(j^{sa}=j_{sa})}^{\boldsymbol{l_i}} \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik})!\cdot\left(j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{j_i=1}^{(\ )}\sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}\sum_{(j^{sa}=j_{sa})}^{(\ )}\sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{l} < \boldsymbol{n} \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{sa}^{i} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} - j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=}
$$

$$
(\boldsymbol{l_{ik}}+j_{s} \quad j_{sa}^{ik}) \quad \boldsymbol{l_i}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \quad \sum_{j^{sa}=j_{sa}} \quad \sum_{j_i=s}
$$

$$
(n_i-j_{ik} \quad 1)
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \quad \sum_{(\quad \boldsymbol{n}+\mathbb{k}-j_{ik}+1)}
$$

$$
+j_{ik}-j \qquad (\quad j^{sa}-j_i)
$$

$$
\sum_{n_{sa}=\boldsymbol{n}} \quad \sum_{a+1 \quad (n_s=\boldsymbol{n}-j_i+1)}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2 \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{ik} - n_{sa} - 1)!}{(\quad - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik})! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s=1)}
$$

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$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )}\left(j^{sa}=j_{sa}\right)\sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-j_s\right)!}{\left(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2\right)!\left(\boldsymbol{n}+j_{ik}-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{n}-\boldsymbol{l_i})!}{(\boldsymbol{n}-\boldsymbol{n}-\mathbb{k})!\cdot(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_i} \leq D + s - \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + \quad - j_{sa} \leq j_i \leq \quad \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j^{ik} \quad j_{sa} = \quad \wedge \boldsymbol{l_i} + \quad - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j^{ik} = j_{sa} - 1 \wedge j_{sa} = j_{sa}^{ik} - 1$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j^{ik}, \mathbb{k}_2, j_{sa}, \quad j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \quad \wedge$

$\mathbb{k}_z: z \quad 2 \wedge \mathbb{k} = \mathbb{k}_1 + \quad \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )}\sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

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$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i-n_{ik}-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}$$

$$\frac{(n_s-$$

$$\frac{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}{}\cdot$$

$$\frac{\left(\boldsymbol{l_i}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-)!\cdot(-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

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$1 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \ge 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(} \sum_{j_{ik}+\boldsymbol{l_{sa}}-\mathbb{k}}^{)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik})! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}\sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}\sum_{(j_{sa}=j_{sa})}^{(\ )}\sum_{j_i=s}$$

$$\sum_{n_{ik}=\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}-j_{ik}-j^{sa}}\sum_{(n_{sa}=n_{ik}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{\left(n_i-j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(D+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}=1\wedge\boldsymbol{l_i}\geq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j_{sa}^{ik}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j_{sa}^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_i}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}\geq\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}\wedge z=0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}=j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_s^s,\mathbb{k}_1,j_{sa}^{ik},\ldots,j_{sa}^{i}\}\wedge$

$s\geq 4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_1:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}\sum_{(j_s=1)}^{(\ )}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_i}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n}^{(n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)!}{(j_{ik}-2)!\cdot(n_i - n_{ik}}$$

$$\frac{(n_{ik} - n_{sa}}{(j^{sa} - j_{ik}}$$

$$\frac{(n_i - n_s}{(j_i - 1)!}$$

$$\frac{(n_s - 1)!}{(n_s - j_i - \boldsymbol{n} - 1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik})!\cdot\left(j_{ik}-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\quad -j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

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$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik})!\cdot\left(j_{ik}-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot\quad-j_i)!}\cdot$$

$$\sum_{k=1}^{(\ )}\left(j_s-\right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )}\left(j^{sa}-j_{sa}\right)\sum_{j_i=s}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\ \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{\left(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2\right)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < \quad \wedge \boldsymbol{l_s} = 1 \wedge \quad \leq D+s-\boldsymbol{n} \wedge$

$1 \leq \quad \leq j_{ik}-j_{sa}^{\quad} \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-\quad \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\quad -j_{sa}^{ik}\quad > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} = j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}\colon \left\{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{} \sum_{(j_s=1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=}^{\boldsymbol{l_i}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_i-\quad-\mathbb{k}_1+1)}
$$

$$
n_{ik}+ \quad j^{sa}-\mathbb{k}_2 \ (n_{sa}+ \quad j_i)
$$

$$
\sum_{-j^{sa}+}^{\boldsymbol{n}} \sum_{(n_s=\boldsymbol{n}-j_i+1)}
$$

$$
\frac{(n_i - n_{ik}}{\quad - 2)!\ (n_i - n_{ik} - j_{ik} + 1)!} \cdot
$$

$$
\frac{(\quad - n_{sa}\quad 1)!}{\quad a} - j_{ik} - 1)!\ (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(\quad - n_s - 1)!}{(j_i - j \quad 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik})! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=1}^{} \sum_{(j_s=1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa} - j_i \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - j_i = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} >= 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa} = j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=s}^{\boldsymbol{l_{sa}}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

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$$\frac{(n_i - n_{ik} - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - [illegible]} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!}$$

$$\frac{([illegible] - j_{sa}^{ik})!}{([illegible] - j_{ik})! \cdot ([illegible] - j_{sa}^{ik})!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - [illegible])!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - [illegible]) \cdot ([illegible]^{sa} + j_{sa} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - [illegible] - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{\mathbb{k}_z}S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{sa} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{(j_{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(j_i + j_{sa} - s)} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{n}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )}\sum_{(j^{sa}=j_i+j_{sa}-s)}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}-j_s}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s-1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} \wedge n \wedge \boldsymbol{l_s} > D - \quad + 1 \wedge$

$2 \leq j_s \leq j_{ik} \quad ik + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} \quad j_{sa} \quad j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \quad = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \ \sum_{(j^{sa} = \boldsymbol{l_{ik}} + \boldsymbol{n} + j_{sa} - D - j_{sa}^{ik})}^{(j_i + j_{sa} - s)} \ \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - }^{\boldsymbol{n}}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \ \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + }^{(n_i - j_s + 1)} \ \sum_{ = \boldsymbol{n} + \mathbb{k}}^{n_{is} - j_{ik} - \mathbb{k}_1} j_{ik} + 1
$$

$$
(n_{ik} + \quad - j^{sa} - \mathbb{k}_2)\ n_{sa} + \quad - j_i
$$

$$
\sum_{ = \boldsymbol{n} - j^{sa}} \ \sum_{n_s = \boldsymbol{n} - j_i + 1}
$$

$$
\frac{(n_i - n_{is}}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} \quad n_{ik} - \mathbb{k}_1 \quad 1)!}{(j_{ik} \quad j_s - 1)! \cdot (n \quad + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n \quad - n_{sa} - 1)!}{\quad sa - j_{ik} \quad 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{\quad i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \ \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\ )} \ \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{n}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\quad)!\cdot(\quad-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}$ $-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j$ $+s-j_{sa} \leq j_i$ $\boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j$ $=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}$ $j_{sa}-s>$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge$ $<j_{sa}^{ik}-1$

$\boldsymbol{s}$: $\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik},$ $j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

s $4 \wedge \boldsymbol{s}=$ $\mathbb{k} \wedge$

$\mathbb{k}_z$ $=2 \wedge \mathbb{k}=\mathbb{k}$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\ )}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(j_i+j_{sa}-s)}\ \sum_{(j^{sa}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}-D-1)}^{\boldsymbol{n}}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!} \cdot \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!} \cdot \frac{(n_s-1)!}{(n_s+j_i-1)!\cdot(\boldsymbol{n}-j_i)!} \cdot \frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!} \cdot \frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!} \cdot \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}<j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$S_{i\ldots,j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(\boldsymbol{l_i})!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot j_i)!}+$$

$$\sum_{j_i=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\quad)}\ \sum_{(j^{sa}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\boldsymbol{n}+j_{sa}-s)}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{n}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_i}[illegible])}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\ \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}[illegible])}^{(\boldsymbol{n}+j_{sa}-s)}\ \sum_{j_i=j^{s}[illegible]-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum^{(n_i-j_s+[illegible])}_{[illegible]+1)}\ \sum_{n_{ik}[illegible]+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}[illegible]+j_{ik}-j[illegible]\mathbb{k}_2)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-[illegible]-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-[illegible]-\mathbb{k}_1-\mathbb{k}[illegible])!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}$ [illegible] $D-\boldsymbol{n}$ [illegible] $1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+$ [illegible] $\wedge\, j_s+j_{sa}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq$ [illegible] $+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j^{ik}_{sa}+1=$ [illegible] $+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<$ [illegible] $I=\mathbb{k}>0\wedge$

[illegible] $<j^{i}$ [illegible] $1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}\text{[illegible]}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}\text{[illegible]}}$$

$$\sum_{(n_{sa}=\text{[illegible]}^{sa}+1)}^{(n_{ik}+j_{ik}\text{[illegible]}\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-\text{[illegible]}}^{n_{sa}\text{[illegible]}^{sa}-j_i}$$

$$\frac{(n_i - n\text{[illegible]} - 1)!}{(j_s\text{[illegible]}2)! \cdot (\text{[illegible]} n_i\text{[illegible]} j_s + 1)!} \cdot$$

$$\frac{\text{[illegible]}_{is} - n_{ik}\text{[illegible]}\mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)\text{[illegible]}(n_{is} + j_s\text{[illegible]}n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik}\text{[illegible]} n_{sa} - 1)!}{(j^{s\text{[illegible]}}j_{ik} - 1)!\text{[illegible]}n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{\text{[illegible]}_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\;-$$

$$\sum_{k=1}^{} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} <$ $_{a}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}}^{(\boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s - 1)} \sum_{(j^{sa} = \boldsymbol{l_s} + \boldsymbol{n} + j_{sa} - D - 1)}^{\boldsymbol{n}} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-j_i-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-$$

$$\frac{(\boldsymbol{n}-\boldsymbol{l_i})!}{(\boldsymbol{n}-\boldsymbol{l_i}-j_i)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{s=1}^{(\quad)}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{sa}=\boldsymbol{l_{ik}}}^{(j_{sa}-s)}\ \sum_{(j^{sa}-$$

$$\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}\sum_{(j_s=j_{sa}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-\boldsymbol{l_{sa}}-s)}^{(\boldsymbol{n}+j_{sa}-s)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_{is}+1)}^{-j_s}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i+\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} - j_{sa} + j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + \boldsymbol{n} = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa}}^{\boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s - 1} \sum_{(j^{sa} = j_{ik} + \boldsymbol{l_{sa}} - \boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - }^{\boldsymbol{n}}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{\boldsymbol{n} + \mathbb{k}}^{n_{is} - j_{ik} - \mathbb{k}_1} j_{ik} + 1
$$

$$
\sum_{(n_{ik} + j^{sa} - \mathbb{k}_2)}^{} n_{sa} + j_i
$$

$$
\sum_{\boldsymbol{n} - j^{sa} + }^{} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{}
$$

$$
\frac{(n_i - n_{is}}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - j_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - j_s - 1)! \cdot (n + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n - n_{sa} - 1)!}{a - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{i}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_i-j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{sa}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}$ $s-j_{sa}\leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_s$ $-s>\boldsymbol{l_s}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}\leq j_{sa}^{ik}-$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots\right.$ $_{sa}\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=$ $+\mathbb{k}_2\Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_s})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1}\ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_s})}^{(\ )}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\boldsymbol{l_i})!}{(\boldsymbol{l_s}-j_s)!\cdot(\boldsymbol{l_i}-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_s}-s)!}{(j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}-s)!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{n})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{\boldsymbol{n}}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_s})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_s})}^{(\ )}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{(\quad)}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\quad)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s}\ \sum_{(j^{sa}=\quad+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\quad)}\ \sum_{j_i=\quad-j_{sa}}^{\quad-j_s+1)}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\quad-j_s+1)}^{(\quad)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\quad)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\quad)}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(\quad-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}<j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}})}^{(\ )} \sum_{j_i=\boldsymbol{n}-D}^{\boldsymbol{n}}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{(n_i-j_s)}^{(n_i-j_s)} \sum_{n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}
$$

$$
\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}+1)}^{(n_{sa}=n_{ik}+j_{ik}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{ik}+j_{ik}-j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j_{ik} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1}{(j_{ik}-j_s-1)}$$

$$\frac{(n_{ik}}{(j^{sa}-j_{ik}}$$

$$\frac{}{(j_i-j^{sa}-1)}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}$ $s-j_{sa} \leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_s$ $-s > \boldsymbol{l_s}$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \ldots_{sa}\right\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\boldsymbol{n})}\sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{\boldsymbol{n}}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-$$

$$\frac{(\boldsymbol{l_s}-j_s$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_s}-s)!}{(j^{sa}+\boldsymbol{l_i}-$$

$$\frac{(j_i+$$

$$\frac{(D$$

$$\frac{}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\boldsymbol{n}-s+1)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_i}\sum_{\boldsymbol{s}+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-1)}^{(\boldsymbol{n}-1)}$$

$$\sum_{j_{ik}=j_{ik}-\boldsymbol{l_s}\,(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\quad)}$$

$$\sum_{(n_i=j_s+1)}^{n}$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}\,(n_{is}=\boldsymbol{n}+j_s+1)}$$

$$\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(\quad-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \quad < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_i \quad j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$\quad \quad j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}<j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
\begin{aligned}
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \\
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=j_{ik}}^{(\ )} \sum_{j_i=}^{\boldsymbol{n}} {}_{+\boldsymbol{n}-D} \\
\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{+\mathbb{k}-j_s+1)}^{(n_i-j_s)} \sum_{=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-\mathbb{k}_1} \\
\sum_{(n_{sa}=}^{+j_{ik}-} \sum_{n_s=\boldsymbol{n}-j_i+1}^{+j^{sa}-j_i} \\
\frac{(n_i-n_{is}-1)!}{(j_s-\ )!\cdot(n_i-n_{is}-j_s+1)!}\cdot \\
\frac{(n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot \\
\frac{(n_{ik}-n_{sa}-1)!}{(\ -j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot \\
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot \\
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot \\
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot \\
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot \\
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+ \\
\sum_{k=1} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{n}-s+1)}
\end{aligned}
$$

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$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{\boldsymbol{n}} \sum_{j_i=j^{sa}+s-j_{sa}}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i}{(j_s-2)\cdot(n_i-n_{is}}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_{}-1)!}{(j_{ik}-j_s-1)!\cdot(}$$

$$\frac{(n_{i}-n_{sa}-}{(j^{sa}-j_{i}-1)!\cdot(}\cdot$$

$$\frac{n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{n}-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}$$

$$(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!(\boldsymbol{n}-j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}$ $s-j_{sa} \leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_s$ $-s > \boldsymbol{l_s}$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \ldots_{sa}\right\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}\ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\quad)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\quad)!}{(\boldsymbol{l_s}-j_s)!\cdot(\quad-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_s}-s)!}{(j^{sa}+\boldsymbol{l_i}-\quad)!\cdot(j_i+\quad-j^{sa}-s)!}\cdot$$

$$\frac{(D-\quad}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\boldsymbol{n}-s+1)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_i\quad s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\quad)}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\boldsymbol{n}=1}^{(\boldsymbol{n}-j_i+1)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-j_i+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}\sum_{(j^{sa}+\boldsymbol{l_{ik}}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )}\sum_{j_{sa}=j_s-j_{sa}}$$

$$\sum_{\boldsymbol{n}_{is}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq \boldsymbol{n}<n\wedge \boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_i+j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_s+j_{sa}^{ik}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq \boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq \boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l}}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=}^{(\ )} \sum_{\boldsymbol{l}_i)\ j_i=}^{\boldsymbol{n}} \sum_{+\boldsymbol{n}-D}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{(n_i-j_{}}^{(\ )} \sum_{+\mathbb{k}-j_s+1)}^{n_{is}+j_s-} \sum_{=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=}^{+j_{ik}-} \sum_{^{sa}+1)}^{+j^{sa}-j_i} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \quad)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{\quad_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} \quad j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(\quad - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

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$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_i}-\boldsymbol{l_{sa}})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\mathbb{k}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_{sa}}$$

$$\frac{(n_i+j_{sa}-\boldsymbol{n}-\mathbb{k}_1-D-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 = \boldsymbol{l_i} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_s^s, \cdots, \mathbb{k}_1, j_{sa}^{s}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_1: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

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$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{i}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-} \sum_{=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{ik}-n_{ik}-\mathbb{k}_1)!}{(j_{ik}-j_s-1)}$$

$$\frac{(n_{ik}}{(j^{sa}-j_{ik}}$$

$$\frac{(n_{sa}-n_s}{(j_i-j^{sa}-1)}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_i}-\boldsymbol{l_{sa}})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}$ $s-j_{sa}\leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_s$ $-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}\leq j_{sa}^{ik}-$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots_{sa}\right\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=$ $+\mathbb{k}_2\Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - \quad)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \quad)!}{(\boldsymbol{l_s} - j_s)! \cdot (\quad - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - \quad)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \quad)! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \quad - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\quad)} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = j^{sa} + \quad - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s)}^{(\boldsymbol{n} + j_{sa} - s)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

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$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S}_{j_{ik}=\boldsymbol{l_s}} = \sum_{j_{ik}=\boldsymbol{l_s}} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D}^{(\boldsymbol{n} + j_{sa} - s)} \sum_{j^{sa} \ldots - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_i \ldots \boldsymbol{n} + \ldots 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \ldots + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \ldots + j_{ik} - j^{sa} \ldots)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{\left(n_i + j_{ik} - j \ldots - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \ldots - \mathbb{k}_1 - \mathbb{k} \ldots)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} \ldots D - \boldsymbol{n} + \ldots \wedge$

$2 \leq j_s \ldots j_{ik} - j_{sa}^{ik} + 1 \ldots j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j^{ik} \leq j^{sa} \leq \ldots + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} \ldots + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \ldots I = \mathbb{k} > 0 \wedge$

$j_{sa} \ldots - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_s})}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+j^{sa}+1)}^{(n_{ik}+j_{ik}-\boldsymbol{n}+\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}+j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_s})}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} <$ $_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ \ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = \boldsymbol{l_s} + \boldsymbol{n} + j_{sa}^{ik} - D - 1}^{\boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s - 1} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s)}^{(\boldsymbol{n} + j_{sa} - s)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i})!}{\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{1}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}}\ \sum_{(j_{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}\sum_{(j_s=j_i+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-\boldsymbol{l_{sa}}}^{\boldsymbol{n}+j_{sa}^{ik}-s}\ \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}}^{(\ )}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ )}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i+\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_s} - j_{sa}^{ik} - 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}^{}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+}^{(n_i-j_s+1)} \sum_{=\boldsymbol{n}+\mathbb{k}}^{n_{is}-j_{ik}-\mathbb{k}_1} j_{ik}+1
$$

$$
(n_{ik}+ \quad -j^{sa}-\mathbb{k}_2)\ n_{sa}+ \quad j_i
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is}}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is} \quad n_{ik}-\mathbb{k}_1-1)!}{(j_{ik} \quad j_s-1)!\cdot(n \quad +j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n \quad -n_{sa}-1)!}{ \quad sa-j_{ik} \quad -1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{ \quad i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=1}^{} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{n}-s+1)}
$$

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$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{i}-n_{ik}-\mathbb{k}_{}}{(j_{ik}-j_s-1)}$$

$$\frac{(n_{ik}-n_{sa}-1)}{(j^{sa}-j_{ik}-1)!\cdot(}$$

$$\frac{}{(j_i-j^{sa}-1)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\boldsymbol{n}-s+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ \ )} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}$ $s-j_{sa} \leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_s$ $-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \ldots_{sa}\right\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{n}+j_{sa}-s)}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-1)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-j_{sa}^{ik})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}-1)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\boldsymbol{n}-s+1)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{n}+j_{sa}-s)}\sum_{j_{ik}=\boldsymbol{l_{ik}}-\boldsymbol{l_s}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-}^{(\boldsymbol{n}-}\sum$$

$$\sum_{j_{ik}=j_s}^{(}\sum_{-\boldsymbol{l_s}\,(j^{sa}=}^{}\sum_{+j_{sa}-j_{sa}^{ik})\,j_i=}\sum_{\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}\,(n_{is}=\boldsymbol{n}+}^{n}\sum_{-j_s+1)}\sum_{\,n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{)}\sum_{\,n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}-j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l}}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l}}^{(\ )} \sum_{+\boldsymbol{n}+}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{+\mathbb{k}-j_s+1)}^{(n_i-j_} \sum_{=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-}
$$

$$
\sum_{(n_{sa}=}^{+j_{ik}-} \sum_{n_s=\boldsymbol{n}-j_i+1}^{+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \quad)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} \quad j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(\quad - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

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$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\mathbb{k}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_{sa}}$$

$$\frac{(n_i+j_{sa}-\boldsymbol{n}-\mathbb{k}_1-D-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+j_{sa}-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 = \boldsymbol{l_i} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_s^s, \cdots, \mathbb{k}_1, j_{sa}^{s}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

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$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1+1)!}{(j_{ik}-j_s-1)}$$

$$\frac{(n_{ik}}{(j^{sa}-j_{ik}}$$

$$\frac{(n_{sa}-n_s}{(j_i-j^{sa}-1)}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}$ $s-j_{sa} \leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_s$ $-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \ldots_{sa}\right\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{n}+j_{sa}-s)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-}{(\boldsymbol{l_s}-j_s)}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-}$$

$$\frac{(D-\boldsymbol{l_i})}{(D+j_i-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{(\ )}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{n}+j_{sa}-s)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

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$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{\boldsymbol{s}}_{\boldsymbol{n}} = \sum_{1}^{(\ )} \sum_{+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}} \sum_{=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\ \ _{a}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{i}+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}}}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{n}+j_{sa}-s)}\sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(}^{(n_i-j_s+1)}\sum_{n_{ik}=}$$

$$\sum_{(n_{sa}=}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_{}-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\mathbb{k}_1-\mathbb{k}_{}!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}$ $D-\boldsymbol{n}+$ $\wedge$

$2\leq j_{}<j_{ik}-j_{sa}^{ik}+1$ $j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{}^{ik}\leq j^{sa}\leq$ $+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}$ $+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n$ $=\mathbb{k}>0\wedge$

$-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1} \quad \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{n}+j_{sa}-s)} \quad \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \quad \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \quad \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}
$$

$$
(n_{ik}+j_{ik}-\mathbb{k}_2)\ n_{sa}^{\,j^{sa}-j_i}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j_i+1)}^{(j^{sa}+1)} \quad \sum_{n_s=\boldsymbol{n}-j_i}^{\ }
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_s-2)!\ (n_{is}+j_s-j_s+1)!}\cdot
$$

$$
\frac{n_{is}-n_{ik}+\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\ (n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\ (n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{n}+j_{sa}^{ik}-s} \quad \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)} \quad \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-\quad-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+\quad-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-\quad-1)!}{(\quad-j^{sa}-1)!\cdot(n_{sa}+\quad-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\quad+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} <$ $_{a}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ \ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = \boldsymbol{l_s} + \boldsymbol{n} + j_{sa}^{ik} - D - 1}^{\boldsymbol{l_s} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa} - 1} \quad \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{n} + j_{sa} - s)} \quad \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \ \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \ \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \ \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i})!}{\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{1}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+j_{sa}^{ik}-D}\ \sum_{(j_{ik}+j_{sa}-j_{sa}^{ik})}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_i+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{n}+j_{sa}^{ik}-s}\ \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}}^{(\ )}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ )}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i+\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_s} - j_{sa}^{ik} - 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}^{}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+}^{(n_i-j_s+1)} \sum_{}^{n_{is}-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{}^{n_{sa}+j_{sa}-j_i}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is}}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n - n_{sa} - 1)!}{a - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1}^{} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{(\boldsymbol{n}-s+1)}
$$

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$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is}}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{a - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!}$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{k + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!}$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\boldsymbol{n}-s+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ \ )} \sum_{j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}$ $s-j_{sa} \leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_s$ $-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \ldots_{sa}\right\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{n}+j_{sa}-s)}\sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-1)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-1)!\cdot(j^{sa}+j_s-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}-1)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\boldsymbol{n}-s+1)}\sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{n}+j_{sa}-s)}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l_{sa}}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=\boldsymbol{l_{sa}}}^{(\boldsymbol{n}-s+1)}\sum_{\boldsymbol{l_{sa}}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}}^{(\boldsymbol{n}-s+1)}$$

$$\sum_{j_{ik}=j_s-\boldsymbol{l_s}}^{(\boldsymbol{n}-s+1)}\sum_{(j^{sa}=j_{sa}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}-s+1)}\sum_{j_i=j_{sa}-\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{(\boldsymbol{n}-s+1)}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\boldsymbol{n}-s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\boldsymbol{n}-s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\boldsymbol{n}-s+1)}\sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\boldsymbol{n}-s+1)}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{l}\leq\boldsymbol{n}\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{sa}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}-j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

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$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_i}}^{(\ )}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\ldots-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=\ldots+\boldsymbol{n}-D}^{\boldsymbol{n}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\ldots}^{n} \sum_{\ldots+\mathbb{k}-j_s+1)}^{(n_i-j_s\ldots)} \sum_{\ldots=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s\ldots\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\ldots+1)}^{\ldots+j_{ik}-\ldots} \sum_{n_s=\boldsymbol{n}-j_i+1}^{\ldots+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \ldots)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(\ldots n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} \ldots j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(\ldots - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

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$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_{sa}}$$

$$\frac{(n_i+j_{sa}-\boldsymbol{n}-\mathbb{k}_1-D-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+j_{sa}-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 = \boldsymbol{l_i} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{s}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_1: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

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$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{i}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-} \sum_{=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - 1)}{(j_s - 2)\ (n_i - n_{is}\ + 1)!} \cdot$$

$$\frac{(n_{i} - n_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - j_s - 1)\ (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a} - n_s - 1)!}{(j_i - j^{sa} - 1)\ (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\quad)!\cdot(\quad-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}$ $-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j$ $+s-j_{sa} \leq j_i$ $\boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j$ $>\boldsymbol{l_{ik}} \wedge \boldsymbol{l}$ $j_{sa}-s>$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge$ $<j_{sa}^{ik}-1$

$\boldsymbol{s}$: $\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik},$ $j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

s $4 \wedge \boldsymbol{s}=$ $\mathbb{k} \wedge$

$\mathbb{k}_z$ $=2 \wedge \mathbb{k}=\mathbb{k}$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\ )}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(\boldsymbol{l_{sa}} + \boldsymbol{l_{sa}} - j_{ik} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(\boldsymbol{n} - 1)!}{(n_s + \boldsymbol{n} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j_{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s)}^{(\boldsymbol{n} + j_{sa} - s)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j_{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}-D-1}^{j^{sa}+j_{sa}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+j_{sa}-D-s-1)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\boldsymbol{l_{sa}}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D+\boldsymbol{l_i})!}{(D+j_i+\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{j_{ik}=\boldsymbol{l_s}}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{j_{sa}=j_{sa}^{ik}-D-1}^{(\boldsymbol{n}+j_{sa}-s)}\sum_{(j^{sa}=\boldsymbol{l_s}-\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{is}+j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_{\text{[illegible]}}\text{[illegible]}}$$

$$\sum_{k=1}\ \sum_{(j_s = j_{\text{[illegible]}} \text{[illegible]} \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}\ \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D \text{[illegible]})}^{(\boldsymbol{n} + \text{[illegible]} - s)}\ \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k} \text{[illegible]}}^{\boldsymbol{n}\text{[illegible]}}\ \sum_{\text{[illegible]} = \boldsymbol{n} + \mathbb{k} - j_s \text{[illegible]})}^{(\text{[illegible]} j_s + 1)}\ \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + \text{[illegible]} - j^{sa} - \mathbb{k}_2)}^{\text{[illegible]})}\ \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i \text{[illegible]} \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$\text{[illegible]} \geq \boldsymbol{n} < \text{[illegible]} \wedge \boldsymbol{l_s} > D - \text{[illegible]} + 1 \wedge$

$2 \leq j_{\text{[illegible]}} \leq j_{ik} - \text{[illegible]} \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - \text{[illegible]} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\text{[illegible]} - j_{sa}^{ik} \text{[illegible]} = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_s})}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \quad \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{n}+j_{sa}-s)} \quad \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-}^{\boldsymbol{n}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \quad \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+}^{(n_i-j_s+1)} \quad \sum_{=\boldsymbol{n}+\mathbb{k}}^{n_{is}-j_{ik}-\mathbb{k}_1} j_{ik}+1
$$

$$
(n_{ik}+ - j^{sa}-\mathbb{k}_2)\ n_{sa}+ - j_i
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}}^{} \quad \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is}}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n - n_{sa} - 1)!}{a - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_s})}
$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} - 1)!} \cdot$$

$$\frac{(n_{i} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{i} - n_{is} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a} - n_s - 1)!}{i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{ik} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\quad)!\cdot(\quad-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}$ $-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j$ $+s-j_{sa} \leq j_i$ $\boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j$ $>\boldsymbol{l_{ik}} \wedge \boldsymbol{l}$ $j_{sa}-s>$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge$ $<j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \quad j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

s $4 \wedge \boldsymbol{s}=$ $\mathbb{k} \wedge$

$\mathbb{k}_z$ $=2 \wedge \mathbb{k}=\mathbb{k}$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\ )}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+\boldsymbol{n}+j_{sa}^{ik}-D-1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{n}+j_{sa}-s)}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(\boldsymbol{l_{sa}} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(\ \ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{}{(n_s +$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s}$$

$$\frac{}{(j_{ik} + \boldsymbol{l_{sa}} - j^{$$

$$\frac{}{(\boldsymbol{l_i}$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s}^{\boldsymbol{n} + j_{sa}^{ik} - s} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,j_{ik},j^{sa},\ldots} = \sum_{k=1}^{} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\right.}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(\boldsymbol{l}-)!}{(D+j_{-}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(-j_i)!}+$$

$$\sum_{k=}^{(\boldsymbol{n}-s+1)}\sum_{(D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{n}-s)}\left(j^{s}-j_{ik}+j_{sa}-j_{sa}^{ik}\right)\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{i}+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{k=1}^{(\boldsymbol{n}-s+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i + \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - n + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} - 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)} \sum_{=\boldsymbol{n}+\mathbb{k}}^{n_{is}-j_{ik}-\mathbb{k}_1} \sum_{j_{ik}+1}^{}
$$

$$
(n_{ik} \quad -j^{sa}-\mathbb{k}_2)\ n_{sa} \quad -j_i
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - }{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} \quad n_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} \quad n_{sa} - 1)!}{j^{sa} - j_{ik})! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1}^{(\boldsymbol{n}-s+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}
$$

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$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{n}-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\boldsymbol{n}-2)!\cdot(\boldsymbol{n}-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j_{ik}+s-j_{sa} \leq j_i < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = \mathbb{k}_1 + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s,\,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)}\ \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\ \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s}! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$S_{i\ldots,j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\quad)}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_s-\quad)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{\left(\quad-j_{sa}^{ik}+1\right)}$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-\quad+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{\quad}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}^{\quad}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$> \boldsymbol{n} \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \le j_s \le j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \le j_{ik} \le j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \le j^{sa} \le j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{n_i=\boldsymbol{n}+\mathbb{k}-j_s+1}^{\boldsymbol{n}} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_{ik}-\mathbb{k}_1}^{\boldsymbol{n}} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{\boldsymbol{n}} \sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{\boldsymbol{n}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s}\ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )}\ \sum_{j_i=}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-}^{}\ \mathbb{k}_1$$

$$\sum_{(n_{sa}=n_{i}-j^{sa}-}^{(\ )}\ \sum_{j^{sa}-j_i}$$

$$\frac{\left(n_i+\ -j_i-\ -\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1\ \mathbb{k}_2)!\cdot\left(\boldsymbol{n}\ j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > \ -\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}\ ^{ik}_{sa}+1 \wedge\ +j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}\ j_{sa}-j_{sa}^{ik} \leq j\ \leq j_i+j_s\ \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}\ 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}\ j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge\ -\mathbb{k} > \ \wedge$

$j_{sa}\ \leq j_{sa}^{ik}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}<j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s},\cdots\ ,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1+1)!}{(j_{ik}-j_s-1)}$$

$$\frac{(n_{ik}}{(j^{sa}-j_{ik}}$$

$$\frac{(n_{sa}-n_s}{(j_i-j^{sa}-1)}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\boldsymbol{n}-s+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\boldsymbol{n}-s+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$S_{i\ldots,j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\sum_{(j^{sa}=j_{ik}-\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{\mathbb{k}=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\boldsymbol{n} > \boldsymbol{n}-1 \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \le j_s \le j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \le j_{ik} \le j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \le j^{sa} \le j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ldots k-j_{sa}^{ik}+1)} \sum_{(j_s=\ldots+\boldsymbol{n}-D)}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l}_i\ldots}^{(\ldots-s)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-\ldots)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\ldots}^{n} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-\ldots-1)}^{\ldots-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{\ldots j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{\ldots a=\boldsymbol{n}-j^{sa}+1)}^{\ldots+j_{ik}-j^{\ldots}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(\ldots - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

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$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\mathbb{k}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i+j_{sa}-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}-j_i-j_{sa}-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}-s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_{sa}} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} \geq 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{s}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_1 : z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{i}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-} \sum_{=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{ik}-n_{ik}-\mathbb{k}_1}{(j_{ik}-j_s-1)}$$

$$\frac{(n_{ik}}{(j^{sa}-j_{ik}}$$

$$\frac{(n_{sa}-n_s}{(j_i-j^{sa}-1)}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{\ } \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}$ $s-j_{sa} \leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \leq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{s}$ $-s=\boldsymbol{l_{s}}$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-$ $\wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots_{sa}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k} =$ $+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-$$

$$\frac{(\boldsymbol{l_s}-j_s$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_s$$

$$\frac{(j_s+\boldsymbol{l_{ik}}-$$

$$\frac{(D-\boldsymbol{l_i}$$

$$\frac{(D+j_i$$

$$+\sum_{k=1}^{(\boldsymbol{n}-s+1)}\sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_i}^{\boldsymbol{n}+j_{sa}^{ik}-s}\sum_{s+j_{sa}^{ik}-1}^{(\ )}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\quad-j_i)!}$$

$$\sum_{k=}^{(\boldsymbol{n}-s+}\ \sum_{=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}}$$

$$\sum_{j_{ik}=j_s}^{\quad ik-1}\ \sum_{(j^{sa}\quad +\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})\ j_i=\quad \boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\quad -j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{\quad i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \quad \boldsymbol{l} \quad n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \le j_s \le j_{\quad} - j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \le j_{ik} \le j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik} \quad j_{sa}-j_{sa}^{ik} \le j^{sa} \le j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum^{(\ \ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-} \sum_{+s+\boldsymbol{n}} -j_{sa}^{ik}
$$

$$
\sum_{n_i=\boldsymbol{n}+} \sum_{-j_s+1)} \sum_{\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}
$$

$$
\sum_{(n_{sa}=} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \ )! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(\ \ - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} \ \ j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(\ \ - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

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$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_{ik}}+s+\boldsymbol{n}-D-j^{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\cdots-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+\cdots-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-\cdots-\mathbb{k}_1-\cdots)!\cdot(\boldsymbol{n}-\cdots-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}-1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+\cdots-j_{sa}^{ik} \leq j^{sa}+j_i+j_{sa}-s \wedge j^{sa}+j_i+j_{sa}-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \cdots \wedge \boldsymbol{l_{sa}}+\cdots-j_{sa} \leq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \cdots < n \wedge I = \mathbb{k} \cdots 0 \wedge$

$j_{sa} \leq j_{sa}^{i} \cdots 1 \wedge j_{sa}^{ik} = j_s \cdots - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s} \cdots, \mathbb{k}_1, j_{sa} \cdots_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} \cdots s + \mathbb{k} \wedge$

$\cdots z = 2 \cdots \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

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$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l_i}$$

$$(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa}$ $s - j_{sa} \leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_s$ $- s = \boldsymbol{l_s}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} -$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots\right.$ $_{sa}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-}{(\boldsymbol{l_s}-j_s)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_s+1)!}{(j_s+\boldsymbol{l_{ik}}-}\cdot$$

$$\frac{(D-\boldsymbol{l_i})}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_i=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{n}+j_{sa}^{ik}-s}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

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$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{\sum} j_{sa}^{(\mathbb{k}_1)} = \sum \sum_{(\boldsymbol{l_{ik}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{n}+j_{sa}^{ik}} \sum_{(j^{sa}-j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{}\sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1}^{(\boldsymbol{n}-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{n}+j_{sa}^{ik}-s}\ \sum_{(j^{sa}=j_{}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )}\ \sum_{}^{}\ -\boldsymbol{l_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{}^{(n_i-j_s+1}\ \sum_{}^{n_{is}+j_s-j_{ik}-}$$

$$(n_{}-j_{ik}-j^{sa}-\mathbb{k}_2)\cdot\ j^{sa}-j_i$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j_{}+1)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-\ )!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-\ _s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=1} \sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}^{(\boldsymbol{n}-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\mathbb{k}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-1}$$

$$\frac{(n_i+j_{sa}-j_{sa}-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-j_{sa}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}-j_{sa}-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_{sa}} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}, \cdots, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$z = 3 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i}{(j_s-2)!\cdot(n_i-n_{is}}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_2-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-}{(j^{sa}-j_{ik}-1)!\cdot(+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{{}_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\boldsymbol{n}-2)!\cdot(\boldsymbol{n}-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{ik} - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j_{ik} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{ik} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{n} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \cdots, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge \boldsymbol{s} = \mathbb{k} + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}+\boldsymbol{n}-D-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{n}-j_{ik}-\boldsymbol{l_{sa}}-D)!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{\boldsymbol{n}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{}{(n_s +$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s}$$

$$\frac{(\boldsymbol{l_{ik}}$$

$$\frac{(\boldsymbol{l_i}$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s)}^{(\boldsymbol{n} + j_{sa} - s)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s \ldots j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_i}+\boldsymbol{n}+\ldots D-s-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\right.}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(\boldsymbol{l}\quad)!}{(D+j_{\quad}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\quad-j_i)!}+$$

$$\sum_{\quad}^{(j_{ik}-j_{sa}^{ik}+1}\sum_{\quad+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s}\ \sum_{(j^{sa}+\boldsymbol{l_{ik}}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{\quad}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{\quad}+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D}^{\boldsymbol{n}+j_{sa}^{ik}-s}\ \sum_{j_{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_i}}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s)}^{(n_{is}+j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_{sa}=n_{ik}}^{(\ )}\ \sum_{(n_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i+\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}-1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$j_{sa}-j_{sa}^{ik}-1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{\boldsymbol{l_i}=\boldsymbol{n}-D}^{\boldsymbol{n}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-n_{ik}-\mathbb{k}_1}
$$

$$
\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{j_i=j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=1}^{(\boldsymbol{n}-s+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}} {}_{2}-j_{ik}+1$$

$$\sum_{(n_{sa}=}^{(n_{ik}+j_{ik}} {}_{sa}+1) \sum_{n_s=\boldsymbol{n}-j}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{i} - 1)!}{(j_s - 2)! \cdot (\quad j_s + 1)!} \cdot$$

$$\frac{{}_{s} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\boldsymbol{n}-s+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \left(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}}\right) \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\left(\boldsymbol{n}+j_{ik}-\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-}{(D+\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j^{ik}$ $\leq j_{ik} \leq$ $+ j_{sa}^{ik} - j$ $\wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i$ $_{sa} - s \wedge j^{sa}$ $- j_{sa} - j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik}$ $> \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}$ $j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq$ $< n \wedge I =$ $0 \wedge$

$j_s^i \leq j_{sa}^i - 1$ $_{sa}^{ik} = j_{sa}$ $1 \wedge j_{sa}^s <$ $_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}$: $\{$ $\cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2$ $_{sa}, \cdots, j_s$

$> 4 \wedge$ $\leq s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k}$ $\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-\quad-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+\quad-n_{sa}-j^{sa}+1)!}\cdot$$

$$\frac{(n_{sa}-\quad-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j_i-\quad-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\quad+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l_i}$$

$$(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa}$ $s - j_{sa} \leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} >$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_s$ $- s = \boldsymbol{l_s}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} -$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots\right.$ $\left._{sa}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-}{(\boldsymbol{l_s}-j_s)}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_s+1)!}{(j_s+\boldsymbol{l_{ik}}-}\cdot$$

$$\frac{+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+}-$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D - \boldsymbol{n} + 1 \wedge$

$2 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s \ldots j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j_{sa}^{ik}-D+1} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\right.}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\right.-j_{sa})!}$$

$$\frac{(D-)!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{l}-j_i)!}+$$

$$\sum_{}^{(j_{ik}-j_{sa}^{ik}+1)}\sum_{+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s}\ \sum_{+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+j_s-)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{(}\sum_{1\,(j_s=j_{ik}-j_{sa}^{ik}+}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-}^{\boldsymbol{n}+j_{sa}^{ik}-s}\sum_{(j^{sa}=j_{ik}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{}^{n}\sum_{(\quad j_s+1)}$$

$$\sum_{+\mathbb{k}\,(n_{is}=\boldsymbol{n}+}\sum_{j_s+1)\,n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < \quad \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq \quad -j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{s}}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{\mathbb{k}-j_s+1)}^{(n_i-j_}$$

$$\sum_{(n_{sa}=}^{+j_{ik}-} \sum_{n_s=\boldsymbol{n}-j_i+1}^{+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - \quad)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} \quad j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(\quad - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

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$$\sum_{k=1}^{(\boldsymbol{n}-s+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}} {}_{2}-j_{ik}+1$$

$$\sum_{(n_{sa}=\boldsymbol{n}}^{(n_{ik}+j_{ik}} {}_{sa}+1) \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{i} - 1)!}{(j_s - 2)! \cdot (\quad j_s + 1)!} \cdot$$

$$\frac{n_s - n_{ik} \quad \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s \quad n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} \quad n_{sa} - 1)!}{(j^{sa} \quad j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(\quad - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\boldsymbol{n}-s+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)}$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-$$

$$\frac{(D-$$

$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$$

$$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j^{ik}$$

$$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}$$

$$D \geq$$

$$j_s$$

$$\boldsymbol{s}: \{$$

$$> 4 \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k}$$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{n}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>D-\boldsymbol{n}+1\wedge$

$2\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}$ $s-j_{sa}\leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{s}$ $-s=\boldsymbol{l_{s}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}\leq j_{sa}^{ik}-$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots_{sa}\right\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=$ $+\mathbb{k}_2\Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)}\sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{n}+j_{sa}-s)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-}{(\boldsymbol{l_s}-j_s)}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_s}{(j_s+\boldsymbol{l_{ik}}-}\cdot$$

$$\frac{+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+}-$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{n}+j_{sa}-s)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fz S_{j_s \ldots j^{sa}, j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D)}$$

$$\sum_{j_{ik}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{n})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{\boldsymbol{n}=\boldsymbol{l_i}}^{(j_{ik}-j_{sa}^{ik}+1)}\sum_{(\boldsymbol{l_i}+\boldsymbol{n}-D)}^{\boldsymbol{n}+j_{sa}^{ik}-s}\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{l_i}-j_{sa}^{ik}-D-j_{sa}}^{(\boldsymbol{n}+j_{sa}-s)}\sum_{(j^{sa}=\boldsymbol{l_{sa}}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_{is}-j_s+1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{is}-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{\left(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}\right)!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D}^{\boldsymbol{n}+j_{sa}^{ik}-s}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_{ik}=n_{is}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > D-\boldsymbol{n}+1 \wedge$

$2 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=\boldsymbol{l_s}+\boldsymbol{n}-D}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=\boldsymbol{l_{sa}}}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{\mathbb{k}-j_s+1)}^{(n_i-j} \sum_{\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s}
$$

$$
\sum_{(n_{sa}=}^{+j_{ik}-} \sum_{n_s=\boldsymbol{n}-j_i+1}^{+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \ )! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(\ - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=1}^{} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{(\boldsymbol{n}-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}} -j_{ik}+1$$

$$\sum_{(n_{sa}=}^{(n_{ik}+j_{ik}} n_{sa}^{sa}-j_i$$

$$\sum_{(n_{sa}=\boldsymbol{n}}^{} \sum_{n_s=\boldsymbol{n}-j_i}^{}$$

$$\frac{(n_i - n_{i\mathbb{k}} - 1)!}{(j_s - 2)! \cdot (\quad j_s + 1)!} \cdot$$

$$\frac{n_s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{(\boldsymbol{n}-s+1)}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1\right.}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)}$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-$$

$$\frac{(D-$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}$

$D \geq$

j_s

$\boldsymbol{s}$:

$> 4 \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(j_i+j_{sa}-s)}\sum_{(j^{sa}=j_{sa}+1)}^{\boldsymbol{l_{sa}}+j_{sa}-s}\sum_{j_i=s+1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_i-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{sa}})} \sum_{(j^{sa}=j_{sa}+1)}^{\boldsymbol{l_i}} \sum_{j_i=\boldsymbol{l_{sa}}+j_{sa}-s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{\quad - 1)!}{(n_s + \quad - \boldsymbol{n} - 1)$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s}$$

$$\frac{(\boldsymbol{l_i} + \quad - \boldsymbol{l_{sa}}}{(j^{sa} + \boldsymbol{l_i}$$

$$\frac{(D$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\ )} \sum_{j_i = s+1}^{\boldsymbol{l_{sa}} + j_{sa} - s}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{z}S_{j_s, j_{ik}, j_{sa}, j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{(j^{sa} = j_{sa} + 1)}^{(j_i + j_{sa} - s)} \sum_{j_i = s+1}^{\boldsymbol{l_{ik}} + j_{sa}^{ik} - s}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{sa}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\sum_{(j^{sa}=j_{sa}+\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1)}\sum_{(\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}_1}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}_1+1)}^{n_i-j_s}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{ik}+j_{ik}-j_{ik}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_s-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=s+1}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_s}$$

$$\frac{(n_i+j_{sa}-\boldsymbol{n}-\mathbb{k}_1-\boldsymbol{l_i}-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + j_{sa} - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_i} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} = 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_s^s, \cdots, \mathbb{k}_1, j_{sa}^{s}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_1 : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

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$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(j_i+j_{sa}-s)} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_s}+s-1} \sum_{j_i=s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i - 1)}{(j_s - 2) \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_2 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - j_{ik}}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j^{sa}=j_{sa}+1}^{\boldsymbol{l_i}} \sum_{j_i=\boldsymbol{l_s}+s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}}+s)!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_s}+s-1}\sum_{j_i=s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{i,\ldots,j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{(j^{sa} = j_{sa}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i = j^{sa} + s - j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)!\cdot(n_i - n_{is} - j_s + 1)!}\cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)!\cdot(n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)!\cdot(n_{ik} + j_{ik} - n_{sa} - j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s \ldots + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j \ldots a+1)}^{(\boldsymbol{l_{ik}}+j^{ik}-s)} \sum_{j_i=j^{sa}+\ldots}
$$

$$
\sum_{\ldots n+\mathbb{k}}^{n} \sum_{(n_{is} \ldots \mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{\ldots -j_{ik}+1}^{\ldots is+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{\ldots a=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+\ldots j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{\ldots 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - \ldots s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
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$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_s}$$

$$\frac{(n_i+j_{sa}-j_s-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-j_s-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j_{sa}-j_s-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_{sa}} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} = 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{s}, \cdots, j_{sa}^{i}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_1 \cdot z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

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$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{(j^{sa}=j_{sa}+1)}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i - 1)}{(j_s - 2) \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_{} - 1)!}{(j_{ik} - j_s - 1 + j_s - n_{} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{} - n_{sa} - }{(j^{sa} - j_{} - 1)! \cdot (+ j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{{}_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\quad)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{(j^{sa}=j_{sa}+1)}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}$$

$$(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!(\boldsymbol{n}-j_i)!$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}\leq j_{sa}^{ik}-$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots_{sa}\right\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=$ $+\mathbb{k}_2\Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - \quad)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \quad)!}{(\boldsymbol{l_s} - j_s)! \cdot (\quad - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - \quad)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \quad)! \cdot (j^{sa} + j_s - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i} - \quad)!}{(D + j_i - \quad - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\quad)} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = j_{ik} + \boldsymbol{l_{sa}} - \boldsymbol{l_{ik}})}^{(\quad)} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz^{S}_{j_{ik}, j_{sa}^{ik}} = \sum_{j_{ik}=j_{sa}^{ik}+1} \sum_{(j_s = j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{is}+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_i}}$$

$$\sum_{j_{ik} = j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum^{(\ )} (j^{sa} = j_{ik} + \boldsymbol{l_{sa}} \quad j_i = j^{sa} - j_{sa}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum^{(n_i - j_s + 1} \sum (n_i + 1)\ n_{ik} \quad + j_s - j_{ik} - \mathbb{k}_1$$

$$\sum^{(\ )} \sum (n_{sa} \quad + j_{ik} - j^{sa} \quad) \ n_s = n_{sa} + j^{sa} - j_i$$

$$\frac{\left(n_i + j_{ik} - \quad - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \quad - \mathbb{k}_1 - \mathbb{k}_2) \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} \quad 1 \wedge \boldsymbol{l_i} \quad + s \quad \wedge$

$1 \leq \quad \leq j_{ik} - j_{sa}^{ik} + \quad \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad ^{ik} \leq j^{sa} \leq \quad + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} \quad ^{k} + 1 = \boldsymbol{l_s} \quad \boldsymbol{_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \quad J = \mathbb{k} > 0 \wedge$

$\quad < j^i \quad 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_1-j_{sa}+1)}^{(n_{ik}+j_{ik}-\boldsymbol{n}-\mathbb{k}_1)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+s-j_i}
$$

$$
\frac{(n_i-n_{ik}-\mathbb{k}_2-1)!}{(j_s-2)!\cdot(n_{is}+j_s-n_{ik}-\mathbb{k}_2-j_{ik}+1)!}\cdot
$$

$$
\frac{(n_{is}+j_s-n_{ik}-\mathbb{k}_2-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}+j_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\quad)!\cdot(\quad-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}$ $_{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j$ $+s-j_{sa} \leq j_i$ $\boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j$ $=\boldsymbol{l_{ik}} \wedge \boldsymbol{l}$ $j_{sa}-s>$ $\wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge$ $_{sa} < j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \quad j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

s $4 \wedge \boldsymbol{s}=$ $\mathbb{k} \wedge$

$\mathbb{k}_z$ $=2 \wedge \mathbb{k}=\mathbb{k}$ $+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\boldsymbol{l_{sa}}-j_{sa}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{\boldsymbol{l_i}} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}}+s)!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{} \sum_{(j_s=2)}^{(\boldsymbol{l_{sa}}-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{\dots,j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{\dots=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum^{(\ )}_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(\quad\boldsymbol{l_i})!}{(D+j_{\quad}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot\quad j_i)!}-$$

$$\sum_{\quad=1}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+}\ \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}\ (\quad}\ \sum_{j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{\quad=\boldsymbol{n}+\mathbb{k}\ (n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_{\quad}+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$D\geq\boldsymbol{n}<\quad\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$$

$$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$$

$$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1\wedge$$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{\boldsymbol{l_s}=1} \sum_{(j_s=j_{ik}-\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}-\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{j_{sa}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}_1}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}_2+1)}^{n_i-j_s+1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=\boldsymbol{l_{sa}}+s-j_{sa}+1}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )} \sum_{n_s=n_{sa}+j^{sa}-j_i} \frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot \frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\ )!\cdot(\ -2)!}\cdot \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\ -\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i-\ )!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}-j_{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j_{ik}+s-j_{sa} \leq j_i < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}-j_{sa}-s>0 \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}-j_{sa}-1 \wedge j_{sa}^{s}-j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s} \{j_{sa}^{s}, \cdots, \mathbb{k}_1-j_{sa}^{ik}, \mathbb{k}_2, j_{sa}-\cdots, j_{sa}^{i}\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k}$

$\mathbb{k}_z: z=\ \wedge \mathbb{k}=\mathbb{k}_1+\ \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})} \sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(j_i+j_{sa}-s)} \sum_{(j^{sa}=j_{sa}+1)}^{\boldsymbol{l_{ik}}+s-j_{sa}^{ik}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik})} \sum_{(j^{sa}=j_{sa}+1)}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_{ik}}+s-j_{sa}^{ik}+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - \quad)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \quad)!}{(\boldsymbol{l_s} - j_s) \cdot (\quad - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_s} - s)!}{(j^{sa} + \boldsymbol{l_i} - \quad)! \cdot (j_i + \quad - j^{sa} - s)!} \cdot$$

$$\frac{(D - \quad)!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{\quad} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\quad)}$$

$$\sum_{k = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{(j^{sa} = j_i + j_{sa} - s)}^{(\quad)} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{l_{ik}} + s - j_{sa}^{ik}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

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$1 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \le D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$S_{j_s\ j_{ik}\ j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(j_i - s)} \sum_{(j^{sa} = j_{sa}+1)}^{\boldsymbol{l_s}+s-1} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - 1}$$

$$\sum_{i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(\ \ - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{sa}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\sum_{(j_{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-\boldsymbol{l_{sa}})}\sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}_1}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}_1+1)}^{(n_i-j_{is}+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{is}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_s}+s-1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}}$$

$$\sum^{(\ )} \sum_{(n_{sa}=n_{ik}+j_{ik}-\mathbb{k}_2)} \sum_{n_s=n_{sa}+j}$$

$$\frac{(n_i+\quad-\mathbb{k}_1-\quad-j_{sa}^{ik})!}{-\boldsymbol{n}-\mathbb{k}_1\quad)!\cdot(\quad\quad-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\quad-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D\quad j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s}$ $D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}$ $1 \leq j_{ik} \leq$ $a}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+$ $-j_{sa}^{ik} \leq j$ $\leq j_i+j_{sa}-s \wedge$ $sa}+$ $-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1$ $\wedge \boldsymbol{l_{sa}}$ $_{sa}^{ik}-j_{sa} \geq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

D $-\boldsymbol{n} < \boldsymbol{l_i} \leq D$ $\boldsymbol{l_s}+s$ $-1 \wedge$

$\geq \boldsymbol{n} <$ $\wedge I = \mathbb{k} >$ $\wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge$ $_{sa}^{ik}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}$: $\{j_{sa}^{s}, \cdots,$ $, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$> 4 \wedge \boldsymbol{s}$ $s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

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$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{(j^{sa}=j_{sa}+1)}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}} \sum_{=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - 1)}{(j_s - 2) \cdot (n_i - n_{is}}$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_{} - 1)!}{(j_{ik} - j_s - 1 + j_s - n_{} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{} - n_{sa} - }{(j^{sa} - j_{} - 1)! \cdot (+ j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)}$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!}$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!}$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!}$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}}+s)!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{sa}})} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})} \sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{(j^{sa}=j_{sa}+1)}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}-j_i} \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(\boldsymbol{l_i})!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot j_i)!}+$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\quad)}\ \sum_{(j^{sa}=}^{(\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D \ldots - j^{sa} \ldots - j_{sa}}^{(\boldsymbol{l_{ik}} + j_{sa} - j_{sa}^{ik})} \sum$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(\ldots + 1)}^{(n_i - j_s + 1 \ldots)} \sum_{n_{ik} \ldots + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} \ldots + j_{ik} - j^{s} \ldots)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j_{ik} - j_s - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik})!}{(n_i - \ldots - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} \ldots 1 \wedge \boldsymbol{l_s} \ldots D - \boldsymbol{n} \ldots \wedge$

$1 \leq j_{ik} \leq j_{ik} - j_{sa}^{ik} + 1 \ldots j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq \ldots + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} - \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} \ldots \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$\ldots \geq \boldsymbol{n} \ldots \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}}^{(\boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s - 1)} \sum_{(j^{sa} = j_{sa} + 1)}^{\boldsymbol{n}} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} -}
$$

$$
\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s}^{(n_i - j_s + 1)} \sum_{= \boldsymbol{n} + \mathbb{k}}^{n_{is} - j_{ik} - \mathbb{k}_1} j_{ik} + 1
$$

$$
(n_{ik} \quad - j^{sa} - \mathbb{k}_2)\ n_{sa} \quad - j_i
$$

$$
\sum_{= \boldsymbol{n} - j^{sa}} \sum_{n_s = \boldsymbol{n} - j_i + 1}
$$

$$
\frac{(n_i - \quad}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} \quad n_{ik} - \mathbb{k}_{\quad} 1)!}{(j_{i} \quad - j_s - 1)! \cdot (n \quad + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{i} \quad - n_{sa} - 1)!}{{}^{sa} - j_{ik} \quad)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{{}_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s)}^{(\boldsymbol{l_s} + j_{sa} - 1)} \sum_{j_i = j^{sa} + s - j_{sa}}^{\boldsymbol{n}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j^{sa} - j_i - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{\boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s - 1} \sum_{j_{ik} = j_{sa}^{ik} + 1}^{(\ )} \sum_{(j^{sa} = j_{ik} + \boldsymbol{l_{sa}} - \boldsymbol{l_{ik}})}^{\boldsymbol{n}} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{n} \sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{(n_i - j_s + 1)} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{n_{sa} + j^{sa} - j_i} \sum_{n_s = \boldsymbol{n} - j_i + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-}{(\boldsymbol{l_s}-j_s}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_}-s)!}{(j^{sa}+\boldsymbol{l_i}-}\cdot$$

$$\frac{(D}{(D+j_i}+$$

$$\sum_{k=1}^{}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+}^{j_{sa}^{ik}-j_{sa}}\ \sum_{}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{\boldsymbol{l_{sa}}}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )}\sum_{j_i=j_{ik}+j_s-j_{sa}}^{(\ )}$$

$$\sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_i+j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_s})}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=\ +\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\ -D}^{\boldsymbol{n}}
$$

$$
\sum_{\ +\mathbb{k}}^{n} \sum_{(n_{is}=\ \mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\ -j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{\ a=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j\ \ j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_s})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\ )!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\ -\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}$ $_{sa}^{ik}-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j$ $+s-j_{sa} \leq j_i$ $\boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j$ $=\boldsymbol{l_{ik}} \wedge \boldsymbol{l}$ $j_{sa}-s>$ $\wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq D+\boldsymbol{l_s}$ $-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}$ $=j_{sa}-1 \wedge j_{sa}^{s}$ $_{sa}^{ik}-1 \wedge$

$\boldsymbol{s} \in \{j_{sa}^{s}, \cdots, \mathbb{k}_1$ $_{sa}^{ik}, \mathbb{k}_2, j_{sa}$ $\cdots, j_{sa}^{i}\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k}$

$\mathbb{k}_z: z=$ $\wedge \mathbb{k}=\mathbb{k}_1+$ $\Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{j_{ik}=j_{sa}^{ik}+1}^{(\ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot \frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot \frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot \frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot \frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot \frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot \frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot \frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{(\ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{\boldsymbol{n}} \sum_{j_i=j^{sa}+s-j_{sa}}^{n} \sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}-j_i} \sum_{n_s=\boldsymbol{n}-j_i+1} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - \quad)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \quad)!}{(\boldsymbol{l_s} - j_s)! \cdot (\quad - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_s} - s)!}{(j^{sa} + \boldsymbol{l_i} - \quad)! \cdot (j_i + \quad - j^{sa} - s)!} \cdot$$

$$\frac{(D - \quad)!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{\quad} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\quad)}$$

$$\sum_{j_{ik} = \boldsymbol{l_i} + \quad}^{j_{sa}^{ik} + j_{sa}^{ik} - 1} \quad \sum_{(j^{sa} = j_{ik} + \boldsymbol{l_{sa}} - \boldsymbol{l_{ik}})}^{(\quad)} \quad \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \quad \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \quad \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \quad \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

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$1 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \le D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,\ldots,j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=2)}$$

$$\sum_{=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\boldsymbol{l_{sa}}-j_{sa}+1)}\sum_{(j_s=\boldsymbol{l_i}+1}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\quad)}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-1)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}}^{n}\sum_{(n_{is}=\boldsymbol{n}+1}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}$$

$$\sum_{(n_i=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_s-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=1}^{(\boldsymbol{l_{sa}}-j_{sa}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=j^{sa}+s-j}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}} \cdots - j_{ik}-\mathbb{k}_1$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-}^{(\ )} \sum \cdots \mathbb{k}_2) \; n_s=n_{sa}+j \cdots j_i$$

$$\frac{\left(n_i + \cdots - \mathbb{k}_1 - \cdots - j_{sa}^{ik}\right)!}{\cdots - \boldsymbol{n} - \mathbb{k}_1 \cdots \mathbb{k}_2)! \cdot \left(\cdots j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\cdots - j_s)! \cdot (j_s-2)!} \cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D \cdots j_i-\boldsymbol{n}-\boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \cdots D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} \cdots 1 \leq j_{ik} \leq \cdots a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + \cdots - j_{sa}^{ik} \leq j \cdots j_i + j_{sa} - s \wedge \cdots a + \cdots - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \cdots \wedge \boldsymbol{l_{sa}} \cdots - j_{sa} \cdots \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \cdots - \boldsymbol{n} < \boldsymbol{l_i} \leq D \cdots \boldsymbol{l_s} + s \cdots - 1 \wedge$

$\cdots \geq \boldsymbol{n} < \cdots \wedge I = \mathbb{k} > \cdots \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \cdots j_{sa}^{ik} \cdots - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$\cdots > 4 \wedge \boldsymbol{s} \cdots s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i - 1)}{(j_s - 2) \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k} - 1)!}{(j_{ik} - j_s - 1 + j_s - n - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - j}{(j^{sa} - j_{ik} - 1)! \cdot (+ j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(l_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{} \sum_{(j_s=2)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ \ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(\boldsymbol{l_i}$$

$$\frac{(\boldsymbol{l_i})!}{(D+j_{sa}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_s})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1}^{(n_i$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\boldsymbol{l_s})} \sum_{(j_s = \boldsymbol{l_i} + \boldsymbol{n} - D - s +}$$

$$\sum_{j_{ik} = j_s + \boldsymbol{l_{ik}} - \boldsymbol{l_s}} \sum_{(j^{sa} = j_{ik} + \boldsymbol{l_{sa}}} \sum_{j_i = j^{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_i - j_s +} \sum_{+ j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} + j_{ik} - j} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{\left(n_i + j_{ik} - \right. - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik})!}{(n_i - - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} \quad 1 \wedge \boldsymbol{l_i} \quad D + s - \wedge$

$1 \leq \quad \leq j_{ik} - j_{sa}^{ik} + \quad \wedge j_s + j_{sa} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad {}^{ik}_{sa} \leq j^{sa} \leq \quad + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - \quad {}^{ik} + 1 = \quad \boldsymbol{sa} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < \quad J = \mathbb{k} > 0 \wedge$

$< j^i \quad 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=s+1}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}
$$

$$
\sum_{(n_{sa}=n_{ik}+n_{sa}+1)}^{(n_{ik}+j_{ik}-n_{sa}+\mathbb{k}_1)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i-n_{ik}-1)!}{(j_s-2)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}+j_s-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}+j_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j^{sa}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1}^{\boldsymbol{l_i}}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_{sa} + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=s+1}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} <$ $_{a}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa} = j_i + \boldsymbol{l_{sa}} - \boldsymbol{l_i})}^{(\ )} \sum_{j_i = s+1}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i = \boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n}+\mathbb{k}_2 - j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} -$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)!}$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot$$

$$\frac{(\boldsymbol{l_i})!}{\boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{1}^{} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{+1}^{\boldsymbol{l_s} + j_{sa}^{}} \sum_{(j^{sa} = j_i + \boldsymbol{l_{sa}} - \boldsymbol{l_i})}^{(\quad)} \sum_{j_i = \boldsymbol{l_s} + s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}\sum_{(j_s=j_i+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_{sa}+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\sum_{j_i=s+1}^{s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(\ )}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{sa}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - j_s)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}
$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{i}-n_{ik}-\mathbb{k}_{}}{(j_{ik}-j_s-1)}$$

$$\frac{(n_{ik}-n_{sa}-1)}{(j^{sa}-j_{ik}-1)!\cdot(}$$

$$\frac{a}{(j_i-j^{sa}-1)}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s -$$

$$\frac{(D - \boldsymbol{l_i}$$

$$(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa}$ $s - j_{sa} \leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} >$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_s$ $- s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik} -$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \ldots_{sa}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} =$ $+ \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-1)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-1)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-1)!\cdot(j^{sa}+j_s-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}-1}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(-j_i)!}$$

$$\sum_{=1}^{(}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-}$$

$$\sum_{j_{ik}=}\ \sum_{(n_{sa}=j_{sa}+1)\ j_i-}\boldsymbol{l_i}-\boldsymbol{l_{sa}}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+}\ \sum_{-j_s+1)\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}-j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_i}}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}\ldots)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{s}\ldots\boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\ldots}^{n} \sum_{\ldots\mathbb{k}-j_s+1)}^{(n_i-j_s\ldots)} \sum_{\ldots\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-\ldots\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\ldots+1)}^{\ldots+j_{ik}-\ldots} \sum_{n_s=\boldsymbol{n}-j_i+1}^{\ldots+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - \ldots)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(\ldots n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} \ldots j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(\ldots - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

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$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}} -j_{ik}-\mathbb{k}_1$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \sum_{\mathbb{k}_2)\ n_s=n_{sa}+j^{s}}$$

$$\frac{\left(n_i+\right.\ -\mathbb{k}_1-\ -j_{sa}^{ik})!}{(\ -\ -\mathbb{k}_1-\ )!\cdot(\boldsymbol{n}-\ -j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\ -j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq 0 + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \leq \boldsymbol{l_{sa}} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} \geq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa}^{i} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa}^{s} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik} - j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} > s + \mathbb{k} \wedge$

$\mathbb{k} \cdot z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-} \sum_{=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - 1)}{(j_s - 2)\ (n_i - n_{is}\ - 1)!} \cdot$$

$$\frac{(n_{i} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)\ (n_{i} - n_{is} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik}\ n_{sa} - 1)!}{(j^{sa} - j_{ik}\ - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a} - n_s\ - 1)!}{j_i - j^{sa} - 1)\ (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{{}_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s}$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \ldots\right\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_{sa}})} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-}{(\boldsymbol{l_s}-j_s)}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-}$$

$$\frac{(D-\boldsymbol{l_i})}{(D+j_i-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}}\sum_{\boldsymbol{+l_{ik}-l_s}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

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$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{l_s}-1)} \sum_{(j_s=2)}^{(\boldsymbol{l_s})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{(j_{ik}+j_{sa}-j_{sa})}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{(\boldsymbol{l_s})}\sum_{(j_s=2}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ )}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}}\sum_{j^{sa}}-\boldsymbol{l_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_i-j_s+1)}\sum_{n_{ik}=}\sum_{j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=}\sum_{j_{ik}-j^{sa}}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_{}-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\mathbb{k}_1-\mathbb{k}_{}!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}$ $1\wedge\boldsymbol{l_s}\leq$ $-\boldsymbol{n}$ $1\wedge$

$1\leq j_{}$ $j_{ik}-j_{sa}^{ik}+1$ $j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-$ $\leq j^{sa}\leq$ $+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}$ $+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+s-\boldsymbol{n}$ $\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1\wedge$

$\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-\boldsymbol{l_{ik}}}^{\boldsymbol{l_{ik}}+s-j_{sa}^{ik}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - j_s)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}
$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{ik}}+s-j_{sa}^{ik}+1}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}}{(j_{ik}-j_s-1)}$$

$$\frac{(n_{i}-n_{sa}-1)}{(j^{sa}-j_{i}-1)!\cdot(}$$

$$\frac{a}{(j_i-j^{sa}-1)}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\boldsymbol{l_{ik}}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-\ldots)!}$$

$$\frac{(D-\boldsymbol{l_i}\ldots}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\ldots(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}\ldots s-j_{sa} \leq \ldots \boldsymbol{n}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \ldots \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_s \ldots -s=\boldsymbol{l_s} \ldots$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa} \ldots \wedge j_{sa}^{s} < j_{sa} \ldots 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{\ldots}\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\ldots \wedge$

$\mathbb{k}\cdot z=2 \wedge \ldots=\mathbb{k}_1+\ldots \Rightarrow$

$$fz\mathcal{S}_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{j_{ik}=j_{sa}^{ik}+1}^{(\ )}\sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_s}+s-1}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{n}\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}-j_i}\sum_{n_s=\boldsymbol{n}-j_i+1}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{\quad - 1)!}{(n_s + \quad - \boldsymbol{n} - 1)$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s}$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}$$

$$\frac{(D$$

$$\sum_{k=1}^{}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l}_{\boldsymbol{k}}-j_{sa}\right)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_s}^{(\quad)}\ \sum_{(j^{sa}=j_i+\boldsymbol{l_i}-\boldsymbol{l_{sa}})}^{(\quad)}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-\quad 1)}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$> \boldsymbol{n} \ldots \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \Bbbk > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \Bbbk_1, j_{sa}^{ik}, \Bbbk_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \Bbbk \wedge$

$\Bbbk_z: z = 2 \wedge \Bbbk = \Bbbk_1 + \Bbbk_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{n}+j_{sa}-D-\boldsymbol{l_{ik}})}^{(\boldsymbol{l_{ik}}+j^{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}} \sum_{n_i=\boldsymbol{n}+\Bbbk}^{n} \sum_{(n_{is}=\boldsymbol{n}+\Bbbk-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\Bbbk_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\Bbbk_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\Bbbk_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \Bbbk_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \Bbbk_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

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$$\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa} = \boldsymbol{l_{ik}} + j_{sa} - j_{sa}^{ik}+1)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l}}$$

$$\sum_{n_i = \boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2+1}$$

$$(n_{ik}+j_{ik}$$

$$(n_{sa}=$$

$$\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (n_i$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} + n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}}^{(\boldsymbol{l_{ik}} + j_{sa} - j_{sa}^{ik})} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\ )!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\ -\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}\ -j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j\ +s-j_{sa} \leq j_i\ \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j\ \geq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}\ j_{sa}-s=\ \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}\ -\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}\ j_{sa}-1 \wedge j_{sa}^{s}\ _{sa}^{ik}-1 \wedge$

$\boldsymbol{s} \in \{j_{sa}^{s},\cdots,\mathbb{k}_1\ _{sa}^{ik},\mathbb{k}_2,j_{sa}\ \cdots,j_{sa}^{i}\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\mathbb{k}$

$\mathbb{k}_z: z=\ \wedge \mathbb{k}=\mathbb{k}_1+\ \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\ \ )}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-1)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(\boldsymbol{l_{sa}} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(\ \ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-}{(\boldsymbol{l_s}-j_s)}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-}$$

$$\frac{(D-\boldsymbol{l_i})}{(D+j_i-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{(\ )}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+}\ \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

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$1 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \le D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\mathbb{k}_z S_{j_s, j_{ik}, j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_s})}$$

$$\boldsymbol{l_i} \sum_{j_{ik} = j_{sa}^{ik}}^{j_{sa}^{ik} - D - s - 1} \sum_{(j^{sa} = \boldsymbol{l_i} + j_{sa} - D - s)}^{(\ + j_{sa} - s)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=1}^{(\ )}\ \sum_{(j_s=j_{sa}+\boldsymbol{l_s}-\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D}^{\boldsymbol{l_{ik}}}\ \sum_{j_{sa}=j_{ik}+j_{sa}-j_s}^{(\boldsymbol{n}+\quad-s)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n}\ \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}$$

$$\sum_{a=\boldsymbol{n}-j^{sa}+1)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(\quad-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

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$$\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s}^{\boldsymbol{l_{ik}}} \sum_{\left(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}\right)}^{(\ )} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is}} \quad - j_{ik} - \mathbb{k}_1$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j}^{(\ )} \sum_{\mathbb{k}_2)} \sum_{n_s = n_{sa} + j^s}$$

$$\frac{\left(n_i + \right. \quad - \mathbb{k}_1 - \quad - j_{sa}^{ik})!}{(\quad - \quad - \mathbb{k}_1 - \quad)! \cdot (\boldsymbol{n} \quad - j_{sa}^{ik})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\quad - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D \quad j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \quad D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa} \quad 1 \leq j_{ik} \leq \quad a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + \quad - j_{sa}^{ik} \leq j \quad j_i + j_{sa} - s \wedge \quad a \quad - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \quad \wedge \boldsymbol{l_{sa}} \quad - j_{sa} \quad \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + \quad - \boldsymbol{n} < \boldsymbol{l_i} \leq D \quad \boldsymbol{l_s} + s \quad - 1 \wedge$

$\quad \geq \boldsymbol{n} < \quad \wedge I = \mathbb{k} > ($

$j_{sa} \leq j \quad - 1 \wedge \quad _{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \quad j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$> 4 \wedge \quad s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ , j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_i=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{ik}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)}$$

$$\frac{(n_{ik}}{(j^{sa}-j_{ik}}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(\boldsymbol{l_{sa}} + \boldsymbol{l_{sa}} - j_{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fz\boldsymbol{S}_{j_s,j_{ik},j^{sa},j_i}=\sum_{k=1}^{}\sum_{(j_s=2)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-\text{[illegible]})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\text{[illegible]}-j_{sa}\right)!}$$

$$\frac{(\text{[illegible]})!}{(D+j_{\text{[illegible]}}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\text{[illegible]}-j_i)!}+$$

$$\sum_{k=\text{[illegible]}}\sum_{\text{[illegible]}}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)}$$

$$\sum_{\text{[illegible]}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}\sum_{(j^{sa}\text{[illegible]}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+\text{[illegible]}-s)}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n\text{[illegible]}+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1\text{[illegible]})}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}\sum_{(j^{sa}=j_{i\text{[illegible]}}+j_{sa}-j_{sa}^{i\text{[illegible]}})}^{(\;)}\sum_{\text{[illegible]}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{\text{[illegible]}}+\mathbb{k}\text{[illegible]})}^{(n_i-j_s+1)}\sum_{n_{ik}=\text{[illegible]}j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\text{[illegible]}j_{ik}-j^{sa}\text{[illegible]})}^{(\text{[illegible]})}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-\text{[illegible]}-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\text{[illegible]}\mathbb{k}_1-\text{[illegible]})!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}$ [illegible] $\wedge\,\boldsymbol{l_s}\leq$ [illegible] $-\,\boldsymbol{n}$ [illegible] $1\,\wedge$

$1\leq j_s$ [illegible] $j_{ik}-j_{sa}^{ik}+1$ [illegible] $j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\,\wedge$

$j_{ik}+j_{sa}-$ [illegible] $\leq j^{sa}\leq$ [illegible] $+\,j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\,\wedge$

$\boldsymbol{l_{ik}}$ [illegible] $+\,1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\,\wedge$

$D+s-\boldsymbol{n}$ [illegible] $\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1\,\wedge$

[illegible] $n\wedge I=\mathbb{k}>0\,\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\,\wedge$

$\boldsymbol{s}\!:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\,\wedge$

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$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{} \sum_{(j_s=2)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}^{}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)} \sum_{=\boldsymbol{n}+\mathbb{k}}^{n_{is}-j_{ik}-\mathbb{k}_1} \sum_{j_{ik}+1}^{}
$$

$$
(n_{ik} \quad -j^{sa}-\mathbb{k}_2)\ n_{sa} \quad -j_i
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - \quad)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} \quad n_{ik} - \mathbb{k}_1 \quad 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{i} \quad n_{sa} - 1)!}{sa - j_{ik} \quad)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1}^{} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s})}
$$

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$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{i}-n_{ik}-\mathbb{k}_{}}{(j_{ik}-j_s-1)}$$

$$\frac{(n_{ik}-n_{sa}-1)}{(j^{sa}-j_{ik}-1)!\cdot(}$$

$$\frac{}{(j_i-j^{sa}-1)!}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ \ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-\ldots)!}$$

$$\frac{(D-\boldsymbol{l}\ldots)}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}\ldots s-j_{sa} \leq \ldots \boldsymbol{n}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \ldots \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_s \ldots -s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}\ldots 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-\ldots \wedge j_{sa}^{s}<j_{sa}\ldots 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j\ldots\} \wedge$

$s>4 \wedge \boldsymbol{s}=s+\ldots \wedge$

$\mathbb{k}\cdot z=2 \wedge \ldots=\mathbb{k}_1+\ldots \Rightarrow$

$$fz\mathcal{S}_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\ \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_{ik}}+s-j_{sa}^{ik}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + \boldsymbol{n} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j_{sa}^{ik} - \boldsymbol{l_{ik}})! \cdot (j_{sa}^{ik} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + \boldsymbol{l_i})!}{(D + \boldsymbol{n} - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa} = j_i + \boldsymbol{l_{sa}} - \boldsymbol{l_i})}^{(\ )} \sum_{j_i = \boldsymbol{l_{ik}} + s - j_{sa}^{ik} + 1}^{\boldsymbol{n}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-j_{sa}}^{(\quad)}\ \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\quad)}\ \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_{ik}}+s-j_{sa}^{ik}}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}^{(n_i-\quad-1)}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$\boldsymbol{n}\ \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \le D-\boldsymbol{n}+1 \wedge$

$1 \le j_s \le j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \le j_{ik} \le j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \le j^{sa} \le j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

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$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(j_s = j_{ik} \cdots \boldsymbol{l_{ik}})} \cdots$$

$$\sum_{j_{ik}=\cdots+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa} \cdots \boldsymbol{l_{sa}}-l_i) \cdots}^{\boldsymbol{l_s}+s-1} \sum \cdots D-j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is} \cdots \mathbb{k}-j_s+1)}^{(n_i-j_s)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n \cdots -j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}}^{(\ )}\ \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-}^{(n_{ik}+j_{ik}-}\ \sum_{n_{sa}+j^{sa}-}^{\boldsymbol{n}-j_i+1}$$

$$\frac{-n_{is}-1)!}{(-2)!\cdot(-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-\mathbb{k}_1-1)!}{(j_{ik}-1)!\cdot(+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\ )} \left(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i}\right) \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \left(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1\right) \sum_{n_{ik}=n_{is}+j_s-j_{ik}}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}^{} {}_{+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1\right.}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)} \cdot \frac{-j_s\big)!}{\left(\boldsymbol{n}+j_{ik}-\right.{}_{sa}^{ik}\big)!} \cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\ \cdot (j_s-2)!} \cdot$$

$$\frac{(D-}{(D+\ \boldsymbol{n}-\boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j^{ik}$ $\leq j_{ik} \leq$ $+j_{sa}^{ik}-j$ $\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i$ $_{sa}-s \wedge j^{sa}$ $-j_{sa}-j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}$ $> \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}$ $j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j$ $-\boldsymbol{n}<\boldsymbol{l_{sa}}$ $D+\boldsymbol{l_s}+j_{sa}-$ -1

D $\boldsymbol{n}<n \wedge$ $=\mathbb{k}>0$

j_{sa} $j_{sa}^{i}-1 \wedge j_{sa}^{ik}$ $j_{sa}-1$ $<j_{sa}^{ik}-1 \wedge$

$\cdots\{j_{sa}^{s},\cdots \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa} \cdots, j_{sa}^{i}\} \wedge$

$s>4 \wedge \boldsymbol{s}=s$ $\mathbb{k} \wedge$

$\mathbb{k}_2$ $=$ $\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\ )} \left(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}}\right)$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \left(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D\right) \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik})}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j_{ik})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + \boldsymbol{n} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j_{sa} - \boldsymbol{l_{ik}})! \cdot (j_{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + j_{sa}^{ik} - j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_{ik}} + j_{sa} - j_{sa}^{ik})} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz\Big(j_{ik}, j^{sa}, j_i \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})} \sum$$

$$\sum_{j_{ik} = j_{sa} + 1} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=1}^{(\ \ )}\ \sum_{(j_s=j_{\ \ }-\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\ \ -1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{\ \ }-j_{sa}-s)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n}\ \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-\ \ -1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{-j_s+1}\ \sum_{j_{ik}-\mathbb{k}_1}$$

$$\sum_{a=\boldsymbol{n}-j^{sa}+1)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{\ \ +j_{ik}-j_{\ \ }-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(\ \ -j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\mathbb{k}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-\mathbb{k}_1}$$

$$\frac{(n_i+\mathbb{k}_1-\boldsymbol{n}-\mathbb{k}_1-D-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik} \leq 1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+j_{sa}-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 = \boldsymbol{l_{sa}} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+\boldsymbol{l_{sa}}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+\boldsymbol{l_{sa}}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge s = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{ik}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)}$$

$$\frac{(n_{ik}}{(j^{sa}-j_{ik}}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(\boldsymbol{l_{sa}} + \boldsymbol{l_{ik}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,\,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\ \ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{sa}}+\cdots_{sa}^{ik}-D-j_{sa}-1}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{n}+j_{sa}-s)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}$$

$$\frac{(D-}{(D+j_{}-\boldsymbol{n}-\boldsymbol{l_i})!\,(\quad j_i)!}+$$

$$\sum_{}^{(\quad)}\sum_{(j_{}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{j^{sa}=j_{sa}^{ik}-D-j_{sa}}^{(\boldsymbol{n}+}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n_{}}\ \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1}^{(n_{}+j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}}}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\ \sum\ -\boldsymbol{l_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_i-j_s+1)}\ \sum_{n_{ik}=}\ \sum_{j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=}\ \sum_{j_{ik}-j^{sa}}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j_{ik}-j_{}-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-\mathbb{k}_1-\mathbb{k}_{}!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}\ldots1\wedge\boldsymbol{l_s}\leq\ldots-\boldsymbol{n}\ldots1\wedge$

$1\leq j_s\ldots j_{ik}-j_{sa}^{ik}+1\ldots j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-\ldots\leq j^{sa}\leq\ldots+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}\ldots_s\ldots+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}-\boldsymbol{n}\ldots\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1\wedge$

$\ldots n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s}^{(n_i-j_s+1)} \sum_{=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}}^{(n_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{ik} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)}
$$

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$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-} \sum_{=\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_{}}{(j_{ik}-j_s-1)}$$

$$\frac{(n_{ik}-n_{sa}-1)}{(j^{sa}-j_{ik}-1)!\cdot(}$$

$$\frac{a}{(j_i-j^{sa}-1)}$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)} \sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\ \ )} \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-1)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_{ik} < \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - \wedge j_{sa}^{s} < j_{sa} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \wedge$

$\mathbb{k} \cdot z = 2 \wedge = \mathbb{k}_1 + \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + \boldsymbol{n} - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - 1)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D + \boldsymbol{l_i})!}{(D + \boldsymbol{n} - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s = \boldsymbol{l_{sa}} + \boldsymbol{n} - D - j_{sa} + 1)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik} = j_s + \boldsymbol{l_{ik}} - \boldsymbol{l_s}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\boldsymbol{n} + j_{sa} - s)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{(\boldsymbol{l_s})}\sum_{(j_{sa}=}^{(}\ -j_{sa}+1)$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{}$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-\ \ 1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}^{}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$> \boldsymbol{n} \ldots \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=s+1}^{\boldsymbol{n}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\ \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=}^{(n_{ik}+j_{ik}-}\ \sum_{=\boldsymbol{n}-j_i+1}^{}$$

$$\frac{(n_i-n_{is}-1)!}{(\ -2)!\cdot(\ -n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-\ -\mathbb{k}_1-1)!}{(j_{ik}-\ -1)!\cdot(n_{\ }+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{\ }-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

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$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )} \sum_{j_i=s+1}^{\boldsymbol{l_{ik}}+j_{sa}^{ik}-s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{\left(n_i+j_{sa}-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq \boldsymbol{n} + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} < j_i + j_{sa} - s \wedge j^{sa} - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 \leq \boldsymbol{n} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k}_1 > 0 \wedge$

$j_{sa}^{i} \leq j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa}^{s} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} \geq s + \mathbb{k} \wedge$

$\cdot z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(j_i+j_{sa}-s)} \sum_{j_i=s+1}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{i}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{i} - n_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{a} - n_s - 1)!}{i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{ik + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(\ \ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-\quad-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+\quad-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}\quad-1)!}{(\quad j^{sa}-1)!\cdot(n_{sa}+j\quad-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\quad+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\;-$$

$$\sum_{k=1}^{(\quad)} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\quad)} \sum_{j_i=s+1}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}$ $s-j_{sa} \leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_s$ $-s > \boldsymbol{l_s}$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \ldots\right.$ $\left._{sa}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k} =$ $+\mathbb{k}_2 \Rightarrow$

$$fz S_{j_s,\, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\,(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-}{(\boldsymbol{l_s}-j_s}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}}$$

$$\frac{(\boldsymbol{l_i}+}{(j^{sa}+\boldsymbol{l_i}}\cdot$$

$$\frac{(D}{(D+}+$$

$$\sum_{k=1}^{(\ )}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{\boldsymbol{l_{ik}}}\ \sum_{j_{ik}=j_{sa}^{ik}+1}^{(\boldsymbol{l_{sa}})}\ \sum_{(j^{sa}=\boldsymbol{l_{ik}}+j_{sa}^{ik}-s+1)}^{\boldsymbol{l_i}}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{j_{ik}=1}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}-j_{sa}}^{(\boldsymbol{l_{ik}}+j_{sa}^{ik}-s)}\sum_{(j^{sa}=j_{sa}+1)}\sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{j_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

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$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$$

$$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1\ (j_s=j_{ik}} \cdots \boldsymbol{l_{ik}})$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \cdots \sum_{(j^{sa}=j_{sa}} \cdots \sum^{\boldsymbol{l_i}} \cdots +s-j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=} \cdots \mathbb{k}-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}-j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

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$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_s} + j_{sa}^{ik} - 1} \sum_{(j^{sa} = \boldsymbol{l_s} + \ldots)}^{(\boldsymbol{l_{sa}})} \sum_{\ldots = j^{sa} \ldots - j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}_1}^{n} \sum_{\ldots + 1)}^{(n_i - j_s \ldots)} \sum_{n_{ik} \ldots + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} \ldots}$$

$$\sum_{(n_{sa} = \boldsymbol{n} \ldots + 1)}^{(\ldots + j_{ik} - j^{sa} \ldots)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{\ldots j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - \ldots)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} + \ldots - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(\ldots - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+s-j}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}} -j_{ik}-\mathbb{k}_1$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j}^{(\ )} \sum_{\mathbb{k}_2)} \sum_{n_s=n_{sa}+j^{s}}$$

$$\frac{\left(n_i+ -\mathbb{k}_1-\ -j_{sa}^{ik}\right)!}{ -\mathbb{k}_1-)!\cdot(-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D- j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \geq +s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq a+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+ -j_{sa}^{ik} \leq j^{ } < j_i+j_{sa}-s \wedge a -j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 \wedge \boldsymbol{l_{sa}}+ ^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq < n \wedge I = \mathbb{k} 0 \wedge$

$sa \leq j_{sa}^{i} 1 \wedge j_{sa}^{ik} = j_s - 1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_s^s \cdots, \mathbb{k}_1, j_{s} sa, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} s+\mathbb{k} \wedge$

$\mathbb{k}: z = 2 \ \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\quad)!\cdot(\quad-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} \quad - j_{sa}$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j \quad + s - j_{sa} \leq j_i \quad \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j \quad > \boldsymbol{l_{ik}} \wedge \boldsymbol{l} \quad j_{sa} - s > \quad \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \quad {}^{s} < j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s} \cdots, \mathbb{k}_1, j_{sa}^{ik}, \quad j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s \quad 4 \wedge \boldsymbol{s} = \quad \mathbb{k} \wedge$

$\mathbb{k}_z \quad = 2 \wedge \mathbb{k} = \mathbb{k} \quad + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(\boldsymbol{l_{sa}} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} - \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} <$ $_{a}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, j_i} = \sum_{k=1}^{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = j_s + \boldsymbol{l_{ik}} - \boldsymbol{l_s}} \sum_{\left(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik}\right)}^{(\boldsymbol{l_{sa}})} \sum_{j_i = j^{sa} + s - j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - \text{[illegible]}} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!}$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} \text{[illegible]}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \text{[illegible]}^{sa} + j_{sa}^{ik} - \text{[illegible]} j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} \text{[illegible]} s)!}{(j^{sa} + \boldsymbol{l_i} - \text{[illegible]}) \cdot (j_i + \text{[illegible]} - j^{sa} - s)!}$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i \text{[illegible]} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} \text{[illegible]} + \boldsymbol{l_{ik}} - \boldsymbol{l_s}} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\sum_{j_s=2}^{(l_s} \sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\prod_{k=1}^{n} \sum_{(j_s=2)}^{(l_s)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}^{(} \sum_{j_{sa}=j_{ik}+j_{sa}-j_{sa}}^{)} \sum_{j_i=j^{sa}+s-j_{sa}}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{=\boldsymbol{n}+\mathbb{k}-j_s}^{(j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{}$$

$$\sum_{(n_{sa}=n_{ik}+}^{)} \sum_{-j^{sa}-\mathbb{k}_2)\ n_s=n_{sa}+j^{sa}-j_i}^{}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i + \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < \wedge \boldsymbol{l_s} > 1 \wedge \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq \leq j_{ik} - \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(j_i+j_{sa}-s)} \sum_{=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}+s-j_{\cdot}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-}^{n_{is}+j_s-\mathbb{k}_1}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+1}^{(n_{ik}+j_{ik}-j^{sa}-j_{sa})\ n_{sa}+j^{sa}-j_i} \sum_{-j_i+1}^{}
$$

$$
\frac{(n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(n_{is}-j_s-1)!\cdot(n_{ik}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

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$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=\boldsymbol{l_{ik}}+s-j_{sa}^{ik}+1}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+j^{sa}+1)}^{(n_{ik}+j_{ik}-\boldsymbol{n}+\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}+j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{\binom{\ }{\ }} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_{ik}}+s-j_{sa}^{ik}} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{\binom{\ }{\ }} \sum_{n_s=}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1\right.}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)}$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+$ $j_{ik} \leq$ $+j_{sa}^{ik}-$ $\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i$ $_{sa}-s \wedge j^{sa}$ $-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-$ $>\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}$ $j_{sa}-s>\boldsymbol{l_{sa}} \wedge$

$D+$ $\boldsymbol{n} < \boldsymbol{l_i} \leq$ $\boldsymbol{l_s}+s-\boldsymbol{n}-$ $\wedge$

D $\boldsymbol{n} < n \wedge$ $\mathbb{k} > 0$

j_{sa} $j_{sa}^{i}-1 \wedge j_{sa}^{ik}$ $_{sa}-1 \wedge$ $<j_{sa}^{ik}-1 \wedge$

$\{j_{sa}^{s},\cdots$ $_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}$ $\cdots, j_{sa}^{i}\} \wedge$

$s>4 \wedge \boldsymbol{s}=s$ $\wedge$

$\mathbb{k}_z, z=2$ $\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$$fzS_{j_s,\,j_{ik},j^{sa},j_i}=\sum_{k=1}^{\binom{\ }{\ }} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(\boldsymbol{l_{sa}}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\;-$$

$$\sum_{k=1}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}\sum_{(j^{sa}=j_i+j_{sa}-s)}^{(\ )}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{n}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\quad)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-\quad)!}{(\boldsymbol{l_s}-j_s-\quad-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\quad)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\quad)!\cdot(j^{sa}+j_{sa}-j_{ik}-j_{sa})!}$$

$$\frac{(\boldsymbol{l_i}+\quad-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-\quad-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\quad-\boldsymbol{l_i})!}{(D+\quad-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\quad)}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}-\quad-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-\boldsymbol{l_s})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(\boldsymbol{D}-\boldsymbol{l_i})!}{(\boldsymbol{D}-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{j_{ik}=1}^{\boldsymbol{l_{ik}}}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\boldsymbol{l_{sa}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\sum_{(j_{ik}+j_{sa}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\boldsymbol{l_{ik}}=1}^{(\ldots)}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\ldots)}^{(\ldots)}$$

$$\sum_{\boldsymbol{l_{ik}}=j^{sa}+j_{sa}^{ik}-\ldots}^{(\ldots)}\sum_{(j^{sa}=\boldsymbol{l_i}+\ldots j_{sa}-D-s)}^{(\ldots-j_{sa}^{ik})}\sum_{j_i=j^{sa}+s-j_{sa}}^{(\ldots)}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\ldots j_s+1)}^{(\ldots-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ldots)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ldots)}\sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\ldots)}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

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$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s \ldots + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa} \ldots + \boldsymbol{n} - D)}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa} \ldots D-s-1)} \sum_{j_i=\boldsymbol{l_i} \ldots D}^{\boldsymbol{n}}
$$

$$
\sum_{\ldots \boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is} \ldots \mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik} \ldots -j_{ik}+1}^{\ldots s+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{\ldots a=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+\ldots j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-1)}\ \sum_{j_{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+1\ \ +1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+1\ \ +1}^{n_{is}+j_s\ \ -\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j_i+1)}^{(n_{ik}+j_{ik}-\ \ -\mathbb{k}_2)}\ \sum_{\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\ \ }$$

$$\frac{-n_{is}-1)!}{(\ \ -2)!\cdot(\ \ -n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-\ \ -\mathbb{k}_1-1)!}{(j_{ik}-\ \ -1)!\cdot(n\ \ +j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{\ }-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

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$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_i}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+\mathbb{k}_2+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_{is}-n_{ik}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1\right.}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)}$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-$$

$$\frac{(D-$$

$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$$

$$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+$$

$$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}$$

$$D+s-\boldsymbol{n}<\boldsymbol{l_i} \leq$$

$$D \geq \boldsymbol{n} < n \wedge$$

$$j_{sa}$$

$$\cdots\{j_{sa}^{s},\cdots \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{s}$$

$$s>4 \wedge \boldsymbol{s}=s$$

$$\mathbb{k}_2$$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(\boldsymbol{l_{sa}}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}-\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_{ik}}}\ \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} + \boldsymbol{l_s} - \boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik} = j_{sa}^{ik}+1}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \quad \sum_{(j^{sa} = \boldsymbol{l_{sa}} + \boldsymbol{n} - D)}^{(\boldsymbol{l_{sa}})} \quad \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{n}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\cdots)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\cdots)!}{(\boldsymbol{l_s}-j_s-\cdots-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\cdots)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\cdots)!\cdot(j^{sa}+j_s-\cdots-j_{ik}-j_{sa})!}$$

$$\frac{(\boldsymbol{l_i}+\cdots-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-\cdots-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\cdots-\boldsymbol{l_i})!}{(D+\cdots-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}^{(\ \ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+\cdots-1}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\boldsymbol{l}_{\boldsymbol{k}}-j_{sa}\right)!}$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}$$

$$\frac{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})\cdot(j_i+j_{sa}-$$

$$\frac{(D-\boldsymbol{l_i})!}{(\boldsymbol{n}-\boldsymbol{l_i}$$

$$\sum_{1}\ \sum_{(j_s=j_{ik}+\boldsymbol{l_s}-\boldsymbol{l_{ik}})}$$

$$\sum_{j_{ik}}^{j_{sa}^{ik}-1}\ \sum_{(\boldsymbol{n}+j_{sa}^{ik}-}\ \sum_{j_{ik}+j_{sa}-j_{sa}^{ik})}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{\boldsymbol{i}=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fz S_{j_s, j_{ik}, j^{sa}, \ldots} = \sum_{k=1} \sum_{(j_s=2)} \ldots^{(D-s)}$$

$$\sum_{j_{ik} \ldots \boldsymbol{l_{ik}} - \boldsymbol{l_s}} \sum_{(\ldots \boldsymbol{l_{sa}} + \boldsymbol{n} - D)} \sum_{j_i = \boldsymbol{l_i} + \boldsymbol{n} - D}^{\boldsymbol{n}}$$

$$\sum_{\ldots - j_s + 1)}^{n} \sum_{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{\ldots \boldsymbol{n} + \mathbb{k}\ (n_{is} = \ldots - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}$$

$$\ldots (n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)\ n_{sa} + j^{sa} - j_i$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)} \sum_{n_s = \boldsymbol{n} - j_i + 1}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}+j_{sa}^{ik}+1)} \sum_{j_{sa}=j_{ik}+j_{sa}-j_s+1}^{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-j^{sa}-s+1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{(\boldsymbol{n}-j^{sa}+1)}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}-j_{is}+1}^{n} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_{sa}=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_{is}+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}+1)}^{(\ )}\sum_{n_{sa}=n_{ik}+j^{sa}-j_i}$$

$$\frac{(n_i+\mathbb{k}_1-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}-j_{ik}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>0\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_{ik}+j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_s}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1\wedge$

$D+\boldsymbol{n}<\boldsymbol{l_s}\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}
$$

$$
\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}+j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i-n_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=1} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s})}
$$

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$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i-j_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+\boldsymbol{l_{ik}}-\boldsymbol{l_s}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\quad)!\cdot(\quad-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\quad-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}$ $\quad-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j$ $\quad+s-j_{sa} \leq j_i$ $\quad\boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j$ $\quad=\boldsymbol{l_{ik}} \wedge \boldsymbol{l}$ $\quad j_{sa}-s=$ $\quad\wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge$ $\quad_{sa} < j_{sa}^{ik}-1$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik},$ $\quad j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

s $\quad 4 \wedge \boldsymbol{s} =$ $\quad \mathbb{k} \wedge$

$\mathbb{k}_z$ $\quad = 2 \wedge \mathbb{k} = \mathbb{k}$ $\quad + \mathbb{k}_2 \Rightarrow$

$$ {}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_s}+s-1} \sum_{j_i=s+1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i} \frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_{sa}})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ \ )} \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - \quad)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \quad)!}{(\boldsymbol{l_s} - j_s) \cdot (\quad - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_s + 1)!}{(j_s + \boldsymbol{l_{ik}} - \quad)! \cdot (j_{ik} - \quad - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})}{(D + j_i - \quad - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{(j^{sa} = j_i + \boldsymbol{l_{sa}} - \boldsymbol{l_i})}^{(\ )} \sum_{j_i = s+1}^{\boldsymbol{l_s} + s - 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

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$1 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j_{\dots} = \sum_{\dots=1}^{(j_{ik}-j_{sa}^{ik}+} \sum_{j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{i} \quad +1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa}}^{(\boldsymbol{l_{sa}})} \sum_{j^{sa}\ldots-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}\ldots}^{n} \sum_{\ldots+1)}^{(n_i-j_s\ldots} \sum_{n_{i\ldots}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}\ldots}$$

$$\sum_{(n_{sa}=\boldsymbol{n}\ldots+1)}^{(\ldots+j_{ik}-j^{sa}\ldots} \sum_{n_s=\boldsymbol{n}-j_i+1}^{\ldots j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - \ldots)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

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$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\mathbb{k}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i+j_{sa}-j_{sa}-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-j_s-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}-j_i-j_{sa}-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > 1 \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} = 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{s}, \cdots, j_{sa}^{i}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_1 : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{i}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i}{(j_s-2)}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1+1)!}{(j_{ik}-j_s-1)!\cdot(n_i-n_{is}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{sa}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\boldsymbol{l_s})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_{sa}})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j_s\ ,j_{ik},j^{sa},j_i = \sum_{k=1}^{(\boldsymbol{l_s})} \sum_{(j_s=2)}$$

$$\sum_{=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ \ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{(D-}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(}-$$

$$\sum_{1}^{(\boldsymbol{l_s}} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1} \sum_{(j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{(n_i-1)} \sum_{=\boldsymbol{n}+\mathbb{k}\,(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$> \boldsymbol{n} - \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$$

$$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$$

$$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{=2)}^{ik-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l}_i)}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{1}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-}^{-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{a=\boldsymbol{n}-j^{sa}+1)}^{k+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_s - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=1}^{(\boldsymbol{l_s})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_2+1}$$

$$(n_{ik}+j_{ik}$$

$$(n_{sa}$$

$$\frac{(n_i -$$

$$\frac{}{(j_{ik} - j_s - 1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\ )!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\ -\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}$ $-j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j$ $+s-j_{sa} \leq j_i$ $\boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{\ } = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}$ $j_{sa}-s =$ $\wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}$ $-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}$ $j_{sa}-1 \wedge j_{sa}^{s}$ $j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s} \in \{j_{sa}^{s}, \cdots, \mathbb{k}_1$ $j_{sa}^{ik}, \mathbb{k}_2, j_{sa}$ $\cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k}$

$\mathbb{k}_z : z =$ $\wedge \mathbb{k} = \mathbb{k}_1+$ $\Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_{sa}})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{}\ \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{}\ \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{n}+j_{sa}-s)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - \quad)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - \quad)!}{(\boldsymbol{l_s} - j_s)! \cdot (\quad - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{s} + 1)!}{(j_s + \boldsymbol{l_{ik}} - \quad)! \cdot (j_{ik} - \quad - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})}{(D + j_i - \quad - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\quad)} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\boldsymbol{l_s} + j_{sa} - 1)} \sum_{j_{ik} = j^{sa} \quad - \boldsymbol{l_{sa}}} \sum_{(j^{sa} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa} - D - s)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\quad)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik})!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

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$1 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \le D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{ j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i} \right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s,\ldots,j^{sa},j_i} = \sum_{k=1}^{\ldots} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{=\boldsymbol{l_i}+\boldsymbol{n}\ldots-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

$$
\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{\boldsymbol{n}}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{ik}^{ik}}^{\boldsymbol{n}+j_{sa}^{ik}-s}\sum_{(j_{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_s})}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}_1}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{ik}-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+\mathbb{k}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-\mathbb{k}_2}$$

$$\frac{(n_i+j_{ik}-j_{ik}+\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-j_s-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j_{ik}-j_{sa}-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq \boldsymbol{n} - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} + j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > 1 \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + 1 - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{s} \leq j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$z = 4 \wedge z = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)\cdot(n_i - n_{is} \quad + 1)!}\cdot$$

$$\frac{(n_{i} - n_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - j_s - 1)\cdot(\quad j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} \quad n_{sa} - 1)!}{(j^{sa} - j_{ik} \quad 1)!\cdot(\quad + j_{ik} - n_{sa} - j^{sa})!}\cdot$$

$$\frac{a} - n_s \quad 1)!}{(j_i - j^{sa} - 1)!\cdot(n_{sa} + j^{sa} - n_s - j_i)!}\cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)!\cdot(\boldsymbol{n} - j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)!\cdot(j_s - 2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})!\cdot(j_{ik} - j_s - j_{sa}^{ik} + 1)!}\cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})!\cdot(\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(\boldsymbol{l_s})} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{}\ \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ \ )}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ \ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_s}+s-1} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-\text{[illegible]})!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\text{[illegible]}-j_i)!}+$$

$$\sum_{\text{[illegible]}1}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i\text{[illegible]}+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}} \sum_{(j^{sa} = j_i + \boldsymbol{l_{sa}} - \boldsymbol{l_i})}^{(\ )} \sum_{j_i = \boldsymbol{l_{sa}} + s - j_{sa}}^{\boldsymbol{l_s} - 1}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_i = \boldsymbol{n} + \mathbb{k} + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} + j_{ik} - j^{sa} - \mathbb{k}_1)} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{\left(n_i + j_{ik} - j_s - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq \boldsymbol{n} - \boldsymbol{n} - 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1}^{(n_i-j_s+1)} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-j_{ik}-\mathbb{k}_1}^{j_{ik}+1}
$$

$$
(n_{ik}+ \quad -j^{sa}-\mathbb{k}_2)\ n_{sa}+ \quad -j_i
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is}}{(j_s-2)\ (n_i-n_{is}-j_s+1)!}\cdot
$$

$$
\frac{(n_{is} \quad n_{ik}-\mathbb{k}_1 \quad 1)!}{(j_{ik} \quad j_s-1)!\cdot(n \quad +j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot
$$

$$
\frac{(n \quad -n_{sa}-1)!}{sa-j_{ik} \quad 1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+
$$

$$
\sum_{k=1}^{} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}
$$

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$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i - 1)}{(j_s - 2) \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - j_{ik})}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-\quad)!}$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}$ $s-j_{sa}\leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}$ $\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_s$ $-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}-\boldsymbol{n}<\boldsymbol{l_{sa}}\leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}$ $1\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}$ $\wedge j_{sa}^{s}<j_{sa}$ $1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j\right.$ $\wedge$

$s>4\wedge\boldsymbol{s}=s+$ $\wedge$

$\mathbb{k}\cdot z=2\wedge$ $=\mathbb{k}_1+$ $\Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{}{(n_s +$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s}$$

$$\frac{(\boldsymbol{l_{ik}}$$

$$\frac{(D$$

$$\sum_{k=1}^{}$$

$$\sum_{j_{ik}=}$$

$$\sum_{n_i=}^{n}$$

$$\sum_{(n_{sa}=}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}}\sum_{\boldsymbol{l_s}+j_{sa}^{ik}-D-j_{sa}}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-\boldsymbol{n}+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\boldsymbol{l_{ik}}>1\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_s}\le D-\boldsymbol{n}+1\wedge$$

$$1\le j_s\le j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\le j_i\le\boldsymbol{n}\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$$

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$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_{sa}}+\ D-j_{sa})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+\boldsymbol{n}+j^{}}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{D-j_{sa}}^{(\ )} \sum_{j_{ik}+\boldsymbol{l_{sa}}}^{} \sum_{+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=}^{(n_i-j_{}} \sum_{\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{}-j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}\sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{n}+j_{sa}^{ik}-s}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j_i+1)}^{(n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}\sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j_{ik}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}\sum_{(j_s=\boldsymbol{l_{sa}}+\boldsymbol{n}-D-j_{sa}+1)}^{(\boldsymbol{l_s})}$$

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$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)}$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-$$

$$\frac{(D-$$

$$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$$

$$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j_{sa}+j_{sa}^{ik}-j_s \wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}-j_{sa}-j_i \leq \boldsymbol{n} \wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-1 = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}-j_{sa}-s = \boldsymbol{l_{sa}} \wedge$$

$$D+j_{sa}^{ik}-\boldsymbol{n} < \boldsymbol{l_{ik}} \leq D+\boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1$$

$$D \geq \boldsymbol{n} < n \wedge \mathbb{k} > 0$$

$$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j_{sa} < j_{sa}^{ik}-1 \wedge$$

$$\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$$

$$s > 4 \wedge \boldsymbol{s} = s$$

$$\mathbb{k}_2 \leq \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})} \sum_{j_i=\boldsymbol{l_{ik}}+s+\boldsymbol{n}-D-j_{sa}^{ik}}^{\boldsymbol{l_s}+s-1}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\boldsymbol{l_s})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ \ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_s}+s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{}{(n_s +$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s}$$

$$\frac{(\boldsymbol{l_{ik}}$$

$$\frac{(D$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}$$

$$\sum_{j_{ik} = j^{sa} + \boldsymbol{l_{ik}} - \boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa} = j_i + \boldsymbol{l_{sa}} - \boldsymbol{l_i})}^{\boldsymbol{l_s} + s - 1} \sum_{j_i = \boldsymbol{l_{ik}} + s + \boldsymbol{n} - D - j_{sa}^{ik}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$f_{z}(\boldsymbol{l_s}, j_{ik}, j^{sa}, j_{sa}) = \sum_{j_{ik}=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}^{(\boldsymbol{l_s}+j_{sa}-1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{sa}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{(\boldsymbol{l_s})}\sum_{(j_s}$$

$$\sum_{j_{ik}=}\sum_{(\boldsymbol{n}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\sum_{(n_{sa}=\boldsymbol{l_s}+j_{sa})}\sum_{j_i=}\sum_{\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=}\sum_{(n_i-j_s+}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_i+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}+j_{sa}-1)}\sum_{\left(j^{sa}=\boldsymbol{l_{ik}}+\boldsymbol{n}+j_{sa}-D-j_{sa}^{ik}\right)}\sum_{j_i}^{j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s}^{}\mathbb{k}_1$$

$$\sum_{(n_{sa}=n_i}^{(\ )}\sum_{-j^{sa}}^{}+j^{sa}-j_i$$

$$\frac{\left(n_i+\ -j_i-\ -\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1\ \mathbb{k}_2)!\cdot(\boldsymbol{l}\ j_{ik}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>\ \wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}\ \wedge$

$1<j_s\leq j_{ik}\ _{sa}^{ik}+1\wedge\ +j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}\ j_{sa}-j_{sa}^{ik}\leq j\ \leq j_i+j_s\ \wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}\ 1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}\ j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+j_{sa}^{ik}-\boldsymbol{n}\ \boldsymbol{l}\ \leq\ \boldsymbol{l_s}+j_{sa}^{ik}-\boldsymbol{n}-1\wedge$

$D\ \boldsymbol{n}\ \wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}\ \wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\{j_{sa},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2\Rightarrow$

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$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}}^{n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}}^{(n_{ik}+j_{ik}-} \sum_{n_s=\boldsymbol{n}-j_i}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (\quad j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} + \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(\boldsymbol{l_s})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j^{sa}-j_i-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s-\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa}^{ik} - \boldsymbol{n} < \boldsymbol{l_{ik}} \leq D + \boldsymbol{l_s} + j_{sa}^{ik} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_{ik}} + \boldsymbol{n} - D - j_{sa}^{ik})} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{n}+j_{sa}^{ik}-s} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ \ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-$$

$$\frac{(\boldsymbol{l_s}-j_s-$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_s-$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_s-$$

$$\frac{(j_s+\boldsymbol{l_{ik}}-$$

$$\frac{(j_s+\boldsymbol{l_{ik}}-$$

$$\frac{(D-\boldsymbol{l_i}-$$

$$\frac{(D-\boldsymbol{l_i}-$$

$$\frac{(D+j_i-$$

$$\frac{(D+j_i-$$

$$+\sum_{k=1}^{(\boldsymbol{l_s})}\sum_{(j_s=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}+1)}$$

$$\sum_{j_i}^{\boldsymbol{n}+j_{sa}^{ik}-s}\sum_{j_s+j_{sa}^{ik}-1}^{(\ \ )}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(-j_i)!}$$

$$\sum_{k=}^{(\boldsymbol{l_s})}\ \sum_{=\boldsymbol{l_{ik}}+\boldsymbol{n}-D-j_{sa}^{ik}}$$

$$\sum_{j_{ik}=j_s+}^{(\ )}\ \sum_{-1\ (j^{sa}=}\ \sum_{+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})\ j_i=}\ \sum_{+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{-j_s+1)}^{n}\ \sum_{\boldsymbol{n}+\mathbb{k}\ (n_{is}=\boldsymbol{n}+}\ \sum_{j_s+1)\ n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum^{(\ )}\ \sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{sa}^{i}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j_{sa}+1)}^{(j_i+j_{sa}} \sum_{s=s+1}^{\boldsymbol{l_s}+s-1}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{(\mathbb{k}-j_s+1)}^{(n_i-j_s)} \sum_{\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j_{sa}+1)}^{j_{ik}+j_{ik}-j} \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j_{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_{sa}})} \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \left(j^{sa}=j_i+j_{sa}-s\right) \sum_{j_i=s+1}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \left(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1\right) \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}}^{(n_i-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} n_s=\sum_{}^{} +j^{sa}-j_i$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}-j_s\right)!}{\left(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2\right)!\left(\boldsymbol{n}+j_{ik}-j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-)!\cdot(j_s-2)!}$$

$$\frac{(D-)!}{(D+-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j^{ik}-1 \leq j_{ik} \leq +j_{sa}^{ik}-j \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}-j_{sa}-j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}- = \boldsymbol{l_{ik}} \wedge \boldsymbol{l}$ $j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = 0 \wedge$

$j \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa} \wedge 1 \wedge j_{sa}^{s} \leq j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{ , \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}$ $j_{sa}, \cdots, j$

$> 4 \wedge = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}$ $\mathbb{k}$ $_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{} \left(j^{sa}=j_{sa}+1\right) \sum_{j_i=j^{sa}+s-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{}^{\boldsymbol{l_i}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_{sa}})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\ )}\ \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_s}+j_{sa}-1)}\ \sum_{(j^{sa}=j_{sa}+1)}\ \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

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$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} -$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n}$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} <$ $_{a}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = j_{sa}^{ik} + 1}^{\boldsymbol{l_s} + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + \boldsymbol{l_{sa}} - \boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i = j^{sa} + s - j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j^{sa}-s)!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{k=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ \ )}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_{s}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_{s}-j_i)!}\cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{}^{(\quad)}\sum_{(j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{s}}\ \sum_{(j^{}}^{}\ \sum_{j_i=j^{sa}+s-j_{sa}}^{j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{(n_i-\quad1)}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\quad)}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\wedge\ \boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\le D+s-\boldsymbol{n}\wedge$$

$$1\le j_s\le j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\le j_{ik}\le j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$$

$$j_{ik}+j_{sa}-j_{sa}^{ik}\le j^{sa}\le j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\le j_i\le\boldsymbol{n}\wedge$$

$$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s>\boldsymbol{l_{sa}}\wedge$$

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$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}
$$

$$
\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{j_{sa}=j_{ik}+\boldsymbol{l_{sa}}-} \sum_{j_i=j^{sa}+s-j_{sa}}
$$

$$
\sum_{} \sum_{} \sum_{j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{n_i=\boldsymbol{n}+} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}-1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}
$$

$$
{}_{k}+j_{ik}-j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i
$$

$$
\sum_{a=\boldsymbol{n}-j^{sa}+1)} \sum_{n_s=\boldsymbol{n}-j_i+1}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(\quad - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}^{}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )}\sum_{}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+}^{}$$

$$\sum_{(n_{sa}=}^{(\ )}\sum_{}^{}\sum_{+j^{sa}-j_i}^{}$$

$$\frac{\left(n_i-j_{ik}-j_i-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(j_{ik}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 < j_s \leq j_{ik} \leq j_{sa}^{ik}+1 \leq j_{ik}+j_{sa}^{ik}-1 \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j_i \leq j_i+j_{sa}-1 \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}-j_{sa}^{ik}-j_{sa}=\boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} \leq D+s-\boldsymbol{n}-1 \wedge$

$D > \boldsymbol{l} \geq 1 \wedge I=\mathbb{k}>0 \wedge$

$j_{sa} \leq j_{sa}^{i} \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s}=s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(j_i+j_{sa}-s)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}}^{\boldsymbol{l_s}+s-1}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}}
$$

$$
\sum_{(n_{sa}=}^{(n_{ik}+j_{ik}} \sum_{n_s=\boldsymbol{n}-j_i}^{\mathbb{k}_2)\ n_{sa}^{sa}-j_i}
$$

$$
\frac{(n_i - n_{ik} - 1)!}{(j_s - 2)! \cdot (\quad j_s + 1)!} \cdot
$$

$$
\frac{s - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

$$
\sum_{k=1}^{} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}
$$

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$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{sa}})} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{n}} \sum_{j_i=\boldsymbol{l_s}+s}^{n}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{n_{sa}+j^{sa}-\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - j_{ik})!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+j_{sa}-s)}^{\boldsymbol{l_s}+s-1} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\ \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-\ )!\cdot(\ -2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\ -\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}\ -j_{sa}$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j\ +s-j_{sa} \leq j_i\ \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{\ } = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}\ j_{sa}-s > \ \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}\ -\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}\ =j_{sa}-1 \wedge j_{sa}^{s}\ _{sa}^{ik}-1 \wedge$

$\boldsymbol{s} \leq \{j_{sa}^{s},\cdots,\mathbb{k}_1\ _{sa}^{ik},\mathbb{k}_2,j_{sa}\ \cdots,j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k}$

$\mathbb{k}_z : z = \ \wedge \mathbb{k} = \mathbb{k}_1+\ \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)}\ \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s-1)}\ \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{\boldsymbol{n}}\ \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_{sa}})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{\quad - 1)!}{(n_s + \quad - \boldsymbol{n} - 1)$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s}$$

$$\frac{(\boldsymbol{l_{ik}}$$

$$\frac{(\boldsymbol{l_i}$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

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$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}-j_{sa}+1)!\cdot(j_{ik}-j_s-j_{sa}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_{sa}-D-s)!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\boldsymbol{l_s}+j_{sa}-1)}\sum_{j_{ik}=j^{sa}}^{\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}\sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}\sum_{j_i=j^{sa}+s-j_{sa}}^{n}\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{(n_i-j_s+1)}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\ )}\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

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$$1 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$$

$$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$$

$$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$$

$$D + s - \boldsymbol{n} < \boldsymbol{l_i} \le D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$$

$$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$$

$$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$$

$$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$$

$$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$$

$$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$$

$$fzS_{j_s,\ldots,j^{sa},j_i} = \sum_{k=1}^{\ldots} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\ldots+\boldsymbol{n}-D}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-\ldots} \sum_{(\ldots=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ldots)} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-\quad)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-\boldsymbol{l_s}-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-1}\ \sum_{(\quad)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}}}^{\boldsymbol{n}}\ \sum_{}^{j^{sa}+s-j_{sa}}$$

$$\sum_{\quad=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(j_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\boldsymbol{l_s})}\sum_{(j_s=}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}}^{(\ )}\sum^{\boldsymbol{n}}_{j_i=j^{sa}}-j_{sa}$$

$$\sum_{n_i=\boldsymbol{n}+}^{n}\sum_{(}^{(n_i-j_s}\sum_{n_{is}+j_s-j_{ik}}^{}$$

$$\sum_{(n_{sa}=\boldsymbol{n}}\sum_{n_s=\boldsymbol{n}-j_i+1}^{}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+}^{} \sum_{-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}+)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}^{}$$

$$\frac{(n_i+j_{}-\mathbb{k}_{}-\mathbb{k}_{}-j_{sa}^{ik})!}{(n_i-\mathbb{k}_1-)!\cdot(\boldsymbol{n}+\mathbb{k}-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq -\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} - s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \wedge \boldsymbol{l_{sa}} + - j_{sa} \leq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D + - \boldsymbol{n} < \boldsymbol{l_i} \leq D - \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq - 1 \wedge j_{sa} - j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$4 \wedge - s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)} \sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i}{(j_s-2)!\cdot(n_i-n_{is}}$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}}{(j_{ik}-j_s-1}$$

$$\frac{(n_{ik}-n_{sa}-}{(j^{sa}-j_{ik}-1)!\cdot(}$$

$$\frac{n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(\boldsymbol{l_s})} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{n}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\boldsymbol{l_s})} \sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{(\ )} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})} \sum_{j_i=j^{sa}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\,(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}$ $s-j_{sa}\leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_s-s=\boldsymbol{l_s}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}\leq j_{sa}^{ik}-$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots_{sa}\right\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=$ $+\mathbb{k}_2\Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{j^{sa}+j_{sa}^{ik}-j_{sa}}\ \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\ \sum_{j_i=s+1}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-}{(\boldsymbol{l_s}-j_s}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_s}{(j_s+\boldsymbol{l_{ik}}-}\cdot$$

$$\frac{+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(}\cdot$$

$$\frac{(D-}{(D+}+$$

$$\sum_{k=1}^{}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ \ )}\sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{}\sum$$

$$\sum_{j_{ik}=j_{sa}-j_{sa}}^{}\sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\sum_{j_i=s+1}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{\boldsymbol{l_i}=\boldsymbol{n}+\mathbb{k}}^{m}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s,\,j_{ik},\,j^{sa},\,j_i} = \sum_{k=1}^{(j_{sa}^{ik}+1)} \sum_{(j_s=j_{sa}^{ik}+1)}^{j^{sa}+j_{ik}-j_{sa}} \sum_{(j^{sa}=j_{sa}+1)}^{(\boldsymbol{l_s}+j_{sa}} \sum_{j_{ik}=j_{sa}^{ik}+}^{\boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=}^{(n_i-j_s} \sum_{\mathbb{k}-j_s+1)}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{}\sum_{(j_s=}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_{ik}}}\sum_{(j^{sa}=\boldsymbol{l_s}+j_{s}}^{(\boldsymbol{l_{sa}})}\sum_{j^{sa}}^{}-\boldsymbol{l_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(}^{(n_i-j_s+}\sum_{n_{is}}^{n_{is}+j_s-j_{ik}}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-}^{}\sum_{n_s=\boldsymbol{n}-j_i+1}^{}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-1)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{\left(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}\right)!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{(j^{sa}=j_{sa}+1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}^{ik}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{\left(n_i+j_{sa}^{ik}-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_i} \leq \quad + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} \quad 1 \leq j_{ik} \leq \quad a + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + \quad - j_{sa}^{ik} \leq j^{s} \quad j_i + j_{sa} - s \wedge \quad - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \quad \wedge \boldsymbol{l_{sa}} + \quad - j_{sa} \quad \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \quad < n \wedge I = \mathbb{k} \quad 0 \wedge$

$j_{sa} \leq j_{sa}^{i} \quad 1 \wedge j_{sa}^{ik} = j_s \quad - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s} \quad \cdots, \mathbb{k}_1, j_{sa} \quad sa, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} \quad s + \mathbb{k} \wedge$

$\quad z = 2 \quad \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_i}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-}$$

$$\frac{(n_i - 1)}{(j_s - 2)! \cdot (n_i - n_{is} - 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{sa} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{(\ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}+1}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}$$

$$\frac{(D-\boldsymbol{l_i}}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}$ $s-j_{sa}\leq$ $\boldsymbol{n}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{s}$ $-s=\boldsymbol{l_{s}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}\leq j_{sa}^{ik}-$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots_{sa}\right\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=$ $+\mathbb{k}_2\Rightarrow$

$$fz\boldsymbol{S}_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\boldsymbol{l_s})}\sum_{(j_s=2)}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{\boldsymbol{l_{ik}}}\ \sum_{\left(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik}\right)}^{(\boldsymbol{l_{sa}})}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}$$

$$\frac{(\boldsymbol{l_s}-}{(\boldsymbol{l_s}-j_s)}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_s}{(j_s+\boldsymbol{l_{ik}}-}\cdot$$

$$\frac{+j_{sa}^{ik}}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+}-$$

$$\sum_{k=1}^{}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}-1}^{}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\ )}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

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$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$j_{2\ldots,j_{ik},j^{sa},\ldots} = \sum_{z=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+\right.}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-\right.-j_{sa})!}$$

$$\frac{(D-$$

$$(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{l}-j_i)!}+$$

$$\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+}^{\boldsymbol{l_{ik}}}\ \sum_{D\ (j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\ \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_{is}+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{\ldots 1}\sum_{(j_s=j_{ik}\ldots j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}\ldots}\sum_{(j^{sa}=j_i+\boldsymbol{l_s}\ldots)}^{(\ )}\sum_{j_i=\boldsymbol{l_i}+\boldsymbol{n}-D}^{\ldots 1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}\sum_{(n_i\ldots\boldsymbol{n}+\mathbb{k}-j_s+\ldots)}^{(n_i\ldots+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{\ldots a=n_i\ldots k-j^{sa}-\mathbb{k}_2)}^{(\ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i+\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<\ldots\wedge\boldsymbol{l_s}>1\wedge\ldots\leq D-\boldsymbol{n}+1\wedge$

$1\leq\ldots\leq j_{ik}-j_{sa}\ldots\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-\ldots\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\ldots j^{ik}\ldots 1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D+s-\boldsymbol{n}<\boldsymbol{l_i}\leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

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$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-1)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_{ik}=j^{sa}-\boldsymbol{l_{sa}}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}_1}^{n} \sum_{(j_s=\mathbb{k}_1-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{is}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j_{sa}+1)}^{n_{sa}+j_{ik}-j_{sa}} \sum_{n_s=\boldsymbol{n}-j_i+1}^{j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 1)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1\right)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot \left(j_{ik} - j_s - j_{sa}^{ik} + 1\right)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +
$$

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$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}+j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_s-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

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$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_s)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j_{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+j_{sa}-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+s-\boldsymbol{n} < \boldsymbol{l_i} \leq D+\boldsymbol{l_s}+s-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{n} = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} \leq j_{sa}-1 \wedge j_{sa} < j_{sa}^{ik}-1 \wedge$

$\mathbb{k}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s-\mathbb{k} \wedge$

$\mathbb{k}_2 \geq 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s-1} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n+j_i-n-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}^{ik}-D-s}^{\boldsymbol{l_s}+j_{sa}^{ik}-1} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!}$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!}$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{}{(n_s +$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s}$$

$$\frac{(\boldsymbol{l_{ik}}$$

$$\frac{(\boldsymbol{l_{sa}} + j_s$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{} \sum_{(j_s = j_{ik} - j_{sa}^{ik} + 1)}^{(\ )}$$

$$\sum_{j_{ik} = \boldsymbol{l_i} + \boldsymbol{n} + j_{sa}^{ik} - D - s}^{\boldsymbol{l_s} + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\ )} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)}^{(\ )} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik})!} \cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D - \boldsymbol{n} + 1 \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + s - \boldsymbol{n} < \boldsymbol{l_i} \leq D + \boldsymbol{l_s} + s - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{} \sum_{(j_s=2)}^{(\boldsymbol{l_i}+\boldsymbol{n}-D-s)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{k} \sum_{(j^{sa}=\boldsymbol{l_i}+\boldsymbol{n}+j_{sa}-D-s)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-$$

$$\frac{(D-$$

$$\sum_{k=}\ \sum_{j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}$$

$$\sum_{=j_s+j_{sa}}^{\boldsymbol{l_{ik}}}\ \sum_{=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(j_{sa}-s)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

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$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=1}^{(\boldsymbol{l_s}-1)}\sum_{(j_s=\boldsymbol{l_i}+\boldsymbol{n}-D-s+1)}^{(\boldsymbol{l_s})}$$

$$\sum_{(j_{ik}=j_s+j_{sa}-1)}^{(\boldsymbol{l_{ik}})}\sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})}\sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}^{(\boldsymbol{n})}$$

$$\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{n}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{(\boldsymbol{n}+\mathbb{k}-j_s+1)}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}\sum_{n_s=n_{sa}+j^{sa}-j_i}^{(\boldsymbol{n}+\mathbb{k}-j_{sa}+1)}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s = \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}} \sum_{(j_s=2)}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D}^{\boldsymbol{l_s}+s}
$$

$$
\sum_{}^{n} \sum_{(n_i-j_s+1)}^{} \sum_{+j_s-j_{ik}-\mathbb{k}_1}^{}
$$

$$
\sum_{+\mathbb{k}\ (n_{is}-\mathbb{k}-j_s+1)\ n_{ik}}^{} \sum_{}^{} \sum_{j_{ik}+1}^{}
$$

$$
\sum_{}^{(n_{ik}+} \sum_{j^{sa}-\mathbb{k}_2)\ n_{sa}+j^{sa}-j_i}^{}
$$

$$
\sum_{a=\boldsymbol{n}-j^{sa}+1)}^{} \sum_{n_s=\boldsymbol{n}-j_i+1}^{}
$$

$$
\frac{(n_i - n_{is} - 1)!}{\quad - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - \quad s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot
$$

$$
\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot
$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}}\ \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\ )}^{(\ )}\ \sum_{j_i=\boldsymbol{l_s}+s}^{\boldsymbol{n}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\ j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\ \ +1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_i=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}}$$

$$\frac{(n_i-n_{is}-1)!}{(\ \ -2)!\cdot(\ \ -n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-\ \ -\mathbb{k}_1-1)!}{(j_{ik}-\ \ -1)!\cdot(n_{\ }+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(\ \ _{ik}-n_{sa}-1)!}{(\ \ -j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

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$$\sum_{k=1} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{(\ )}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=\boldsymbol{l_{sa}}+\boldsymbol{n}+s-D-j_{sa}}^{\boldsymbol{l_s}+s-1}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_{ik}-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j_{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}}$$

$$\frac{(n_i+j_{sa}-j_{sa}-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-j_s-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}-j_s-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D-j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik} \leq 1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}-s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > 1 \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \geq \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}-1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I=\mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa} \leq j_{sa}^{s}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s},\cdots,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\} \wedge$

$s \geq 4 \wedge s \geq s+\mathbb{k} \wedge$

$\mathbb{k}_z: z=2 \wedge \mathbb{k}=\mathbb{k}_1+\mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=2)}^{(j_{ik}-j_{sa}^{ik}+1)}$$

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$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_{sa}+j^{sa}-\boldsymbol{n}-j_i+1}$$

$$\frac{(n_i - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - \boldsymbol{l_s} - j_{sa}^{ik} + 1)!}{(j_s + \boldsymbol{l_{ik}} - j_{ik} - \boldsymbol{l_s})! \cdot (j_{ik} - j_s - j_{sa}^{ik} + 1)!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa})!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot (j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1} \sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=\boldsymbol{l_s}+j_{sa})}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1} \sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-\quad-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+\quad-n_{sa}-j^{sa}+1)!}\cdot$$

$$\frac{(n_{sa}-\quad-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j_i-\quad-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(\quad+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot(j_{ik}-j_s-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -$$

$$\sum_{k=1}^{(\ \ )} \sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}$$

$$\sum_{j_{ik}=j^{sa}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{l_s}+j_{sa}-1)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

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$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ )} \sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-\ldots)!}$$

$$\frac{(D-\boldsymbol{l_i}\ldots}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\ldots(\boldsymbol{n}-j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} > 1 \wedge \boldsymbol{l_s} \leq D-\boldsymbol{n}+1 \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}\ldots s-j_{sa} \leq \ldots \boldsymbol{n}\ldots$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} \ldots \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_s \ldots s = \boldsymbol{l_{sa}} \wedge$

$D+j_{sa}-\boldsymbol{n} < \boldsymbol{l_{sa}} \leq D+\boldsymbol{l_s}+j_{sa}-\boldsymbol{n}\ldots 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa} \ldots \wedge j_{sa}^{s} < j_{sa}\ldots 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j\ldots\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\ldots \wedge$

$\mathbb{k} \cdot z = 2 \wedge \ldots = \mathbb{k}_1 + \ldots \Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(j_{ik}-j_{sa}^{ik}+1)} \sum_{(j_s=2)}$$

$$\sum_{j_{ik}=\boldsymbol{l_{ik}}+\boldsymbol{n}-D}^{\boldsymbol{l_{sa}}+\boldsymbol{n}+j_{sa}^{ik}-D-j_{sa}-1} \sum_{(j^{sa}=\boldsymbol{l_{sa}}+\boldsymbol{n}-D)}^{(\boldsymbol{n}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

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$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

$$\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa}$$

$$\frac{}{(n_s +$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s}$$

$$\frac{(\boldsymbol{l_{ik}}$$

$$\frac{(\boldsymbol{l_{sa}} + j_s$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} +$$

$$\sum_{k=1}^{(j_{ik} - j_{sa}^{ik} + 1)} \sum_{(j_s = 2)}$$

$$\sum_{j_{ik} = \boldsymbol{l_{sa}} + \boldsymbol{n} + j_{sa}^{ik} - D - j_{sa}}^{\boldsymbol{l_s} + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa}^{ik})}^{(\boldsymbol{n} + j_{sa} - s)} \sum_{j_i = j^{sa} + \boldsymbol{l_i} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_{is} = \boldsymbol{n} + \mathbb{k} - j_s + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = \boldsymbol{n} + \mathbb{k}_2 - j_{ik} + 1}^{n_{is} + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = \boldsymbol{n} - j^{sa} + 1)}^{(n_{ik} + j_{ik} - j^{sa} - \mathbb{k}_2)} \sum_{n_s = \boldsymbol{n} - j_i + 1}^{n_{sa} + j^{sa} - j_i}$$

$$\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot$$

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$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-\cdots)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-\cdots)!}{(\boldsymbol{l_s}-j_s)!\cdot(\cdots-2)!}\cdot$$

$$\frac{(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{s}+1)!}{(j_s+\boldsymbol{l_{ik}}-\cdots)!\cdot(j_{ik}-\cdots-j_{sa}^{ik}+1)!}\cdot$$

$$\frac{\cdots+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa})!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(\cdots+j_{sa}^{ik}-j_{ik}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\cdots-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}+$$

$$\sum_{k=1}^{}\sum_{(j_s=2)}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik}=\boldsymbol{l_s}+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\ \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{n}+j_{sa}-s)}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s})!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot(}\cdot$$

$$\frac{(D-}{+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{(j_s=j_{ik}-j_{sa}^{ik}+1)}^{}\sum$$

$$\sum_{j_{ik}=\boldsymbol{l_{sa}}+}^{\boldsymbol{l_s}+}\sum_{-j_{sa}^{ik}-D-j_{sa}}^{)}\sum_{=j_{ik}+j_{sa}-j_{sa}^{ik})\ j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{is}=\boldsymbol{n}+\mathbb{k}-j_s+1)}^{(n_i-j_s+1)}\sum_{n_{ik}=n_{is}+j_s-j_{ik}-\mathbb{k}_1}$$

$$\sum_{(n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)}^{(\ \ )}\sum_{n_s=n_{sa}+j^{sa}-j_i}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}>1\wedge\boldsymbol{l_s}\leq D-\boldsymbol{n}+1\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D + j_{sa} - \boldsymbol{n} < \boldsymbol{l_{sa}} \leq D + \boldsymbol{l_s} + j_{sa} - \boldsymbol{n} - 1 \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{[illegible]} \sum_{(j_s=2)}^{([illegible]-j_{sa})}
$$

$$
\sum_{j_{ik}=\boldsymbol{l_{ik}}[illegible]-D}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=[illegible]+\boldsymbol{n}-D)}^{([illegible]s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}
$$

$$
\sum_{[illegible]\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{is}=[illegible]-j_s+1)}^{([illegible]-j_s+1)} \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{n_{is}+j_s-j_{ik}-\mathbb{k}_1}
$$

$$
\sum_{(n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{(n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2)} \sum_{n_s=\boldsymbol{n}-j_i+1}^{n_{sa}+j^{sa}-j_i}
$$

$$
\frac{(n_i - n_{is} - 1)!}{(j_s - 2)! \cdot (n_i - n_{is} - j_s + 1)!} \cdot
$$

$$
\frac{(n_{is} - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - j_s - 1)! \cdot (n_{is} + j_s - n_{ik} - j_{ik} - \mathbb{k}_1)!} \cdot
$$

$$
\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot
$$

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$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{\left(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}\right)!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\sum_{k=1}^{}\ \sum_{}^{}$$

$$\sum_{j_{ik}=j_s+j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\ \sum_{}^{}\ \sum_{}^{}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}-j_s+1}^{n}\ \sum_{}^{}\ \sum_{n_{ik}=\boldsymbol{n}+\mathbb{k}_2-j_{ik}+1}^{}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1)}^{}\ \sum_{n_s=\boldsymbol{n}-j_i+1}^{}$$

$$\frac{(n_i-n_{is}-1)!}{(j_s-2)!\cdot(n_i-n_{is}-j_s+1)!}\cdot$$

$$\frac{(n_{is}-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-j_s-1)!\cdot(n_{is}+j_s-n_{ik}-j_{ik}-\mathbb{k}_1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{(\boldsymbol{l_s}-2)!}{(\boldsymbol{l_s}-j_s)!\cdot(j_s-2)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-\boldsymbol{l_s}-j_{sa}^{ik}+1\right)!}{\left(j_s+\boldsymbol{l_{ik}}-j_{ik}-\boldsymbol{l_s}\right)!\cdot\left(j_{ik}-j_s-j_{sa}^{ik}+1\right)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s = \boldsymbol{l_{sa}} + \boldsymbol{n} - D - j_{sa} + 1}^{(\boldsymbol{l_s})}$$

$$\sum_{j_{ik} = j_s + j_{sa}^{ik} - 1} \sum_{(j^{sa} = j_{ik} + j_{sa} - j_{sa})}^{(\ )} \sum_{j^{sa} = \boldsymbol{l_{sa}} - \boldsymbol{l_{sa}}}$$

$$\sum_{n_i = \boldsymbol{n} + \mathbb{k}}^{n} \sum_{(n_i = \boldsymbol{n} + \mathbb{k} + 1)}^{(n_i - j_s + 1)} \sum_{n_{ik} = j_s + j_s - j_{ik} - \mathbb{k}_1}$$

$$\sum_{(n_{sa} = j_{ik} + j_{ik} - j^{sa} - j_{sa})} \sum_{n_s = n_{sa} + j^{sa} - j_i}$$

$$\frac{\left(n_i + j_{ik} - j_s - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_s} - 2)!}{(\boldsymbol{l_s} - j_s)! \cdot (j_s - 2)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_i} \leq j_s + s - \boldsymbol{l} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j^{ik} \leq j^{sa} \leq j_{ik} + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} + j_{sa} + 1 = \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} = j_{sa}^{ik} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

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$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=s}^{\boldsymbol{l_i}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}
$$

$$
\sum_{n_{ik}+j_{ik}-\mathbb{k}_2} \sum_{(n_{sa}=n_{ik}+j_{ik}-j_i)}
$$

$$
\sum_{n_{sa}=\boldsymbol{n}-j_i+1}^{n_{sa}+1} \sum_{(n_s=\boldsymbol{n}-j_i)}
$$

$$
\frac{n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}+\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(n_{sa}-n_s-1)!}{(j_{sa}-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot(j^{sa}-j_{sa})!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s=1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}
$$

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$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}$ $\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik}=j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_{sa}}+s-j_{sa}} \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot(j^{sa}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{\boldsymbol{n}}\sum_{(j_s=j_i)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}\sum_{(j_i=j_{sa})}^{(\ )}\sum_{j_i=s}$$

$$\sum_{\boldsymbol{n}=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}=1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\boldsymbol{l_i}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-\boldsymbol{n}-\mathbb{k}_1+1)}
$$

$$
\sum_{n_{ik}=\boldsymbol{n}-j^{sa}+\mathbb{k}}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1 + 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{sa} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - j^{sa} - \boldsymbol{l_{ik}}\right)! \cdot (j^{sa} - j_{sa})!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=1} \sum_{(j_s=1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}
$$

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$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\quad)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}=1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1=\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}\quad\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z=2\wedge\mathbb{k}=\mathbb{k}_1+\mathbb{k}_2$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\ )}\sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\boldsymbol{l_{sa}})}\sum_{(j^{sa}=j_{sa})}\ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\ \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-j^{sa}-\boldsymbol{l_{ik}}\right)!\cdot(j^{sa}-j_{sa})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s}$$

$$\sum_{j_{ik}=j_{sa}^{ik}(}\sum_{j_i=s}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$\geq \boldsymbol{n} < \wedge \boldsymbol{l_s} = 1 \wedge \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_{ik} - \quad \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad {}_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} \quad > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

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\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_i}} \sum_{j_i=}
$$

$$
\sum_{n_i=}^{n} \sum_{(n_i-\quad -\mathbb{k}_1+1)}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{} \sum_{=\boldsymbol{n}+\mathbb{k}}^{} \sum_{j_{ik}+1)}
$$

$$
n_{ik}+\quad j^{sa}-\mathbb{k}_2\ (n_{sa}+\quad j_i)
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+\quad}^{} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{}
$$

$$
\frac{(n_i \quad n_{ik}-\mathbb{k}_1}{(j_{ik} \quad 2)! \cdot (n_i \quad n_{ik}-j_{ik}-\mathbb{k}_1+1)!} \cdot
$$

$$
\frac{(\quad -n_{sa} \quad 1)!}{a-j_{ik}-1)! \quad n_{ik}+j_{ik}-n_{sa}-j^{sa})!} \cdot
$$

$$
\frac{(\quad -n_s-1)!}{(j_i-j \quad 1)! \cdot (n_{sa}+j^{sa}-n_s-j_i)!} \cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)! \cdot (\boldsymbol{n}-j_i)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik})! \cdot \left(j_{ik}-j_{sa}^{ik}\right)!} \cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})! \cdot (\boldsymbol{n}-j_i)!} -
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s=1)}
$$

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\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}
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$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} \quad \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=s}^{\boldsymbol{l_{sa}}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

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$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

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$$\frac{\left(\boldsymbol{l_{ik}}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik})!\cdot\left(j_{ik}-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s}$$

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$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

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$\geq \boldsymbol{n} < \wedge \boldsymbol{l_s} = 1 \wedge \leq D+s-\boldsymbol{n} \wedge$

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$\boldsymbol{l_{ik}} - j_{sa}^{ik} \quad > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\ )} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{\boldsymbol{l_{ik}}+s-j_{sa}^{ik}} \sum_{j_i=s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}
$$

$$
n_{ik}+j^{sa}-\mathbb{k}_2 \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-n_s-j_i)}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1}{(j_{ik} \quad 2)! \cdot (n_i \quad n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(\quad - n_{sa} \quad 1)!}{a - j_{ik} - 1)! \quad n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
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\frac{(\quad - n_s - 1)!}{(j_i - j \quad 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

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\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

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\frac{\left(\boldsymbol{l_{ik}} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik})! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot
$$

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\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

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\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}
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$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

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$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}$ $\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

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$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_i}+j_{sa}-s)} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

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$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\boldsymbol{l_{ik}} - j_{sa}^{ik})!}{(\boldsymbol{l_{ik}} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot$$

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$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\ (n_s=n_{sa}+j^{sa}-j_i)} \sum^{(\ )}$$

$$\frac{(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik})!}{i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik})!} \cdot$$

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\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{sa}})} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+\mathbb{k}_2}^{(n_{ik}+j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}
$$

$$
\frac{(n_i - n_{ik} - \mathbb{k}_1}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(n_{sa} - 1)!}{(j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_s - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik})! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s=1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}
$$

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$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} \quad \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{ik}}+j_{sa}-j_{sa}^{ik})} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik})!\cdot\left(j_{ik}-\right.}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(-j_i)!}$$

$$\sum_{k=1}^{(\ )}\sum_{(j_s}$$

$$\sum_{j_{ik}=j_{sa}^{ik}(}^{(\ )}\sum_{j_i=s}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\ \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$\geq \boldsymbol{n} < \wedge \boldsymbol{l_s} = 1 \wedge \leq D+s-\boldsymbol{n} \wedge$

$1 \leq \leq j_{ik} - \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad {}_{a}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} \quad > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_i}+j_{sa}^{ik}-s} \ \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \ \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}
$$

$$
n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2 \ (n_{sa}+j^{sa}-j_i)
$$

$$
\sum_{n-j^{sa}+1}^{} \ \sum_{(n_s=\boldsymbol{n}-j_i+1)}
$$

$$
\frac{(n_i \quad n_{ik} - \mathbb{k}_1}{(j_{ik} \quad)! \cdot (n_i \quad _{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(\quad - n_{sa} \quad 1)!}{(\quad a - j_{ik} - 1)! \quad n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(\quad a - n_s - 1)!}{(j_i - j^{s} \quad 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik})! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s=1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )} \ \sum_{(j^{sa}=j_{sa})} \ \sum_{j_i=s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}
$$

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$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n}$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}$ $\boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik})! \cdot (j_{ik} - j_{sa}^{ik})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!}$$

$$\sum_{k=1}^{(\quad)} \sum_{(j_s}$$

$$\sum_{j_{ik}=j_{sa}^{ik}(\quad)}^{(\quad)} \sum_{j_i=s}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}\,(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{n} \sum^{(\quad)}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2\,(n_s=n_{sa}+j^{sa}-j_i)}^{(\quad)}$$

$$\frac{(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik})!}{i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$\geq \boldsymbol{n} < \quad \wedge \boldsymbol{l_s} = 1 \wedge \quad \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_{\quad} \leq j_{ik} - \quad \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} \quad {}^{ik}_{sa} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} \quad > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

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$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_s}}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}
$$

$$
\sum_{n_{ik}+j^{sa}-\mathbb{k}_2\ (n_{sa}+j_i)} \sum_{(n_s=\boldsymbol{n}-j_i+1)}
$$

$$
\frac{(n_i \quad n_{ik} - \mathbb{k}_1}{(j_{ik} \quad 2)! \cdot (n_i \quad n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{(\quad - n_{sa} \quad 1)!}{a - j_{ik} - 1)! \quad n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(\quad - n_s - 1)!}{(j_i - j \quad 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik})! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s=1)}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}
$$

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$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-\quad)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik}-j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa} \quad \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s+\mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1+\mathbb{k}_2$

$$_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}}^{(\boldsymbol{l_{sa}})} \sum_{(j^{sa}=j_{sa})}^{\boldsymbol{l_i}} \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot$$

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$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot$$

$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik})!\cdot\left(j_{ik}-\right.}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(j_i+j_{sa}-j^{sa}-s)!}$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{j_s=1}^{(\ )}\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )}\sum_{(j^{sa}=j_{sa})}\sum_{j_i=s}^{(\ )}\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}^{(\ )}\sum_{(n_s=n_{sa}+j^{sa}-j_i)}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{sa}^{ik}+1 \wedge j_s+j_{sa}^{ik}-1 \leq j_{ik} \leq j^{sa}+j_{sa}^{ik}-j_{sa} \wedge$

$j_{ik}-j_{sa}-j_{sa}^{ik} \leq j^{sa} \leq j_i+j_{sa}-s \wedge j^{sa}+s-j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i}+j_{sa}-s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i}-1 \wedge j_{sa}^{ik} = j_{sa}-1 \wedge j_{sa}^{s} < j_{sa}^{ik}-1 \wedge$

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$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=}
$$

$$
(\boldsymbol{l_{ik}}+j_{s} \quad j_{sa}^{ik}) \quad \boldsymbol{l_i}
$$

$$
\sum_{j_{ik}=j^{sa}+\boldsymbol{l_{ik}}-\boldsymbol{l_{sa}}} \quad \sum_{j^{sa}=j_{sa}} \quad \sum_{j_i=s}
$$

$$
(n_i-j_{ik} \quad 1)
$$

$$
\sum_{n_i=\boldsymbol{n}+\mathbb{k}\ (} \quad \sum_{=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}
$$

$$
+j_{ik}-j \qquad (\quad j^{sa}-j_i)
$$

$$
\sum_{n_{sa}=\boldsymbol{n}} \quad \sum_{a+1 \quad (n_s=\boldsymbol{n}-j_i+1)}
$$

$$
\frac{(n_i \quad n_{ik} - \mathbb{k}_1 - 1)!}{(\quad - 2)! \cdot (n \quad - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot
$$

$$
\frac{\quad ik - n_{sa} - 1)!}{(\quad - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot
$$

$$
\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot
$$

$$
\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik})! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot
$$

$$
\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot
$$

$$
\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -
$$

$$
\sum_{k=1}^{(\ )} \sum_{(j_s=1)}
$$

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$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )} \sum_{(j^{sa}=j_{sa})} \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_i+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1 \quad -j_s)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2) \quad (\boldsymbol{n}+j_{ik}- \quad j_{sa}^{ik})!} \cdot$$

$$\frac{-\boldsymbol{l_i})!}{-\boldsymbol{n} \quad)! \cdot (\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_i} \leq D + s - \quad \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa} \quad - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} \quad - j_{sa} \leq j_i \leq \quad \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j^{ik} \quad j_{sa} = \quad \wedge \boldsymbol{l_i} + \quad - s > \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j^{ik} = j_{sa} - 1 \wedge j_{sa} \quad < j_{sa}^{ik} - 1$

$\boldsymbol{s}: \{j_{sa}^{s} \quad \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, \quad \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \quad \wedge$

$\mathbb{k}_z: z \quad 2 \wedge \mathbb{k} = \mathbb{k}_1 + \quad \Rightarrow$

$$fz S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}} \quad \sum_{(j^{sa}=j_{ik}+\boldsymbol{l_{sa}}-\boldsymbol{l_{ik}})}^{(\ )} \quad \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

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$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i-n_{ik}-\mathbb{k}_1-1)!}{(j_{ik}-2)!\cdot(n_i-n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot$$

$$\frac{(n_{ik}-n_{sa}-1)!}{(j^{sa}-j_{ik}-1)!\cdot(n_{ik}+j_{ik}-n_{sa}-j^{sa})!}$$

$$\frac{(n_{sa}-n_s-1)!}{(j_i-j^{sa}-1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}$$

$$\frac{(n_s-\quad)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-\quad)!}\cdot$$

$$\frac{(\boldsymbol{l_i}-j_{sa}^{ik})!}{(\boldsymbol{l_{ik}}-\quad)!\cdot(\quad-j_{sa}^{ik})!}\cdot$$

$$\frac{(\boldsymbol{l_i}+j_{sa}-\boldsymbol{l_{sa}}-s)!}{(j^{sa}+\boldsymbol{l_i}-j_i-\boldsymbol{l_{sa}})!\cdot(\quad+j_{sa}-j^{sa}-s)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+\quad-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}\sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}\sum_{(j^{sa}=j_{sa})}^{(\ )}\sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik})!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik})!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_i} \leq D+s-\boldsymbol{n} \wedge$

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$1 \le j_s \le j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \le j_{ik} \le j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \le j^{sa} \le j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \le j_i \le \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} = \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s > \boldsymbol{l_{sa}} \wedge$

$D \ge \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \le j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(} \sum_{j_{ik}+\boldsymbol{l_{sa}}-\mathbb{k}}^{} \sum_{j_i=j^{sa}+s-j_{sa}}^{\boldsymbol{l_i}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{\left(\boldsymbol{l_{ik}} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik})! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(\boldsymbol{l_i} + j_{sa} - \boldsymbol{l_{sa}} - s)!}{(j^{sa} + \boldsymbol{l_i} - j_i - \boldsymbol{l_{sa}})! \cdot (j_i + j_{sa} - j^{sa} - s)!} \cdot$$

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$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}-$$

$$\sum_{k=1}\sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}\sum_{(j_{sa}=j_{sa})}^{(\ )}\sum_{j_i=s}$$

$$\sum_{n_{ik}=\mathbb{k}}^{n}\sum_{(n_{ik}=n_i-j_{ik}+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}-j_{ik}-j^{sa}}\sum_{(n_i=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{\left(n_i-j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(D+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_i} \geq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j_{sa}^{ik} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j_{sa} \leq j_i + j_{sa} - s \wedge j_{sa}^{ik} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > 1 \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} = 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{s}, \mathbb{k}_2, j_{sa}^{s}, \cdots, j_{sa}^{i}\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$${}_{fz}S_{j_s,j_{ik},j^{sa},j_i} = \sum_{k=1}\sum_{(j_s=1)}^{(\ )}$$

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$$\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_i}+j_{sa}-s)} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n}^{(n_{sa}+j^{sa}-j}$$

$$\frac{(n_i - n_{ik}}{(j_{ik}-2)! \cdot (n_i}$$

$$\frac{(n_{ik} - n_{sa}}{(j^{sa} - j_{ik}}$$

$$\frac{(}{(j_i -}$$

$$\frac{(n_s}{(n_s}$$

$$\frac{\left(\boldsymbol{l_{ik}} - j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}} - j_{ik})! \cdot \left(j_{ik} - j_{sa}^{ik}\right)!}$$

$$\frac{\left(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - j_{sa}\right)!}{(\quad + j_{sa}^{ik} - j^{sa} - \boldsymbol{l_{ik}})! \cdot \left(j^{sa} + j_{sa}^{ik} - j_{ik} - j_{sa}\right)!}$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1} \sum_{(j_s=1)}^{(\quad)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\quad)} \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\quad)}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\quad)}$$

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$$\frac{\left(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik}\right)!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot \left(\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik}\right)!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

$D \geq \boldsymbol{n} < n \wedge \boldsymbol{l_s} = 1 \wedge \boldsymbol{l_i} \leq D + s - \boldsymbol{n} \wedge$

$1 \leq j_s \leq j_{ik} - j_{sa}^{ik} + 1 \wedge j_s + j_{sa}^{ik} - 1 \leq j_{ik} \leq j^{sa} + j_{sa}^{ik} - j_{sa} \wedge$

$j_{ik} + j_{sa} - j_{sa}^{ik} \leq j^{sa} \leq j_i + j_{sa} - s \wedge j^{sa} + s - j_{sa} \leq j_i \leq \boldsymbol{n} \wedge$

$\boldsymbol{l_{ik}} - j_{sa}^{ik} + 1 > \boldsymbol{l_s} \wedge \boldsymbol{l_{sa}} + j_{sa}^{ik} - j_{sa} > \boldsymbol{l_{ik}} \wedge \boldsymbol{l_i} + j_{sa} - s = \boldsymbol{l_{sa}} \wedge$

$D \geq \boldsymbol{n} < n \wedge I = \mathbb{k} > 0 \wedge$

$j_{sa} \leq j_{sa}^{i} - 1 \wedge j_{sa}^{ik} = j_{sa} - 1 \wedge j_{sa}^{s} < j_{sa}^{ik} - 1 \wedge$

$\boldsymbol{s}: \left\{j_{sa}^{s}, \cdots, \mathbb{k}_1, j_{sa}^{ik}, \mathbb{k}_2, j_{sa}, \cdots, j_{sa}^{i}\right\} \wedge$

$s > 4 \wedge \boldsymbol{s} = s + \mathbb{k} \wedge$

$\mathbb{k}_z: z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1}^{(\ )} \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_{ik}+j_{sa}-j_{sa}^{ik})}^{(\boldsymbol{l_{sa}})} \sum_{j_i=j^{sa}+\boldsymbol{l_i}-\boldsymbol{l_{sa}}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - j_i)!} \cdot$$

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$$\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{ik}}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik})!\cdot\left(j_{ik}-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot\quad -j_i)!}\cdot$$

$$\sum_{k=1}^{(\ )}\left(j_s-\right.$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{(\ )}\left(j^{sa}-j_{sa}\right)\sum_{j_i=s}$$

$$\sum_{=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\ \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{\left.l_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2\right)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i})!}{(D+s-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<\quad\wedge\boldsymbol{l_s}=1\wedge\boldsymbol{l}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_{\quad}\leq j_{ik}-j_{\quad}\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+j_{sa}^{ik}-j_{sa}\wedge$

$j_{ik}+j_{sa}-\quad\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-j_{sa}\leq j_i\leq\boldsymbol{n}\wedge$

$-j_{sa}^{ik}\quad>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-s=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1\wedge j_{sa}^{s}<j_{sa}^{ik}-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots,j_{sa}^{i}\right\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

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$\mathbb{k}_z : z = 2 \wedge \mathbb{k} = \mathbb{k}_1 + \mathbb{k}_2 \Rightarrow$

$$
{}_{fz}S_{j_s\ ,j_{ik},j^{sa},j_i} = \sum_{k=1} \sum_{(j_s=1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_{ik}}} \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )} \sum_{j_i=}^{\boldsymbol{l_i}}
$$

$$
\sum_{n_i=\boldsymbol{n}+}^{n} \sum_{=\boldsymbol{n}+\mathbb{k}\ j_{ik}+1)}^{(n_i-\ -\mathbb{k}_1+1)}
$$

$$
\sum_{=\boldsymbol{n}-j^{sa}+}^{n_{ik}+\ j^{sa}-\mathbb{k}_2} \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+\ j_i)}
$$

$$
\frac{(n_i\ n_{ik}-\mathbb{k}_1}{(j_{ik}\ 2)!\cdot(n_i\ n_{ik}-j_{ik}-\mathbb{k}_1+1)!}\cdot
$$

$$
\frac{(\ -n_{sa}\ 1)!}{(\ a-j_{ik}-1)!\ (n_{ik}+j_{ik}-n_{sa}-j^{sa})!}\cdot
$$

$$
\frac{(\ a-n_s-1)!}{(j_i-j\ 1)!\cdot(n_{sa}+j^{sa}-n_s-j_i)!}\cdot
$$

$$
\frac{(n_s-1)!}{(n_s+j_i-\boldsymbol{n}-1)!\cdot(\boldsymbol{n}-j_i)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{ik}}-j_{sa}^{ik}\right)!}{(\boldsymbol{l_{ik}}-j_{ik})!\cdot\left(j_{ik}-j_{sa}^{ik}\right)!}\cdot
$$

$$
\frac{\left(\boldsymbol{l_{sa}}+j_{sa}^{ik}-\boldsymbol{l_{ik}}-j_{sa}\right)!}{(j_{ik}+\boldsymbol{l_{sa}}-j^{sa}-\boldsymbol{l_{ik}})!\cdot\left(j^{sa}+j_{sa}^{ik}-j_{ik}-j_{sa}\right)!}\cdot
$$

$$
\frac{(D-\boldsymbol{l_i})!}{(D+j_i-\boldsymbol{n}-\boldsymbol{l_i})!\cdot(\boldsymbol{n}-j_i)!}\ -
$$

$$
\sum_{k=1} \sum_{(j_s=1)}^{(\ )}
$$

$$
\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}
$$

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$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\ \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{\left(n_i+j_{ik}-j_i-\mathbb{k}_1-\mathbb{k}_2-j_{sa}^{ik}\right)!}{(n_i-\boldsymbol{n}-\mathbb{k}_1-\mathbb{k}_2)!\cdot\left(\boldsymbol{n}+j_{ik}-j_i-j_{sa}^{ik}\right)!}\cdot$$

$$\frac{(D-\boldsymbol{l_i}}{(D+s-\quad)!\ (\boldsymbol{n}-s)!}$$

$D\geq\boldsymbol{n}<n\wedge\boldsymbol{l_s}=1\wedge\boldsymbol{l_i}\leq D+s-\boldsymbol{n}\wedge$

$1\leq j_s\leq j_{ik}-j_{sa}^{ik}+1\wedge j_s+j_{sa}^{ik}-1\leq j_{ik}\leq j^{sa}+$ $\wedge$

$j_{ik}+j_{sa}-j_{sa}^{ik}\leq j^{sa}\leq j_i+j_{sa}-s\wedge j^{sa}+s-$ $\leq j_i+$ $\wedge$

$\boldsymbol{l_{ik}}-j_{sa}^{ik}+1>\boldsymbol{l_s}\wedge\boldsymbol{l_{sa}}+j_{sa}^{ik}-j_{sa}>\boldsymbol{l_{ik}}\wedge\boldsymbol{l_i}+j_{sa}-$ $=\boldsymbol{l_{sa}}\wedge$

$D\geq\boldsymbol{n}<n\wedge I=\mathbb{k}>0\wedge$

$j_{sa}\leq j_{sa}^{i}-1\wedge j_{sa}^{ik}=j_{sa}-1$ $-1\wedge$

$\boldsymbol{s}:\left\{j_{sa}^{s},\cdots,\mathbb{k}_1,j_{sa}^{ik},\mathbb{k}_2,j_{sa},\cdots^{i}_{sa}\right\}\wedge$

$s>4\wedge\boldsymbol{s}=s+\mathbb{k}\wedge$

$\mathbb{k}_z:z$ $2\wedge\mathbb{k}=\mathbb{k}_1$ $\mathbb{k}_2\Rightarrow$

$$fzS_{j_s\ ,j_{ik},j^{sa},j_i}=\sum_{k=1}^{(\ )}\ \sum_{(j_s=1)}$$

$$\sum_{j_{ik}=j_{sa}^{ik}}^{\boldsymbol{l_{ik}}}\ \sum_{(j^{sa}=j_i+\boldsymbol{l_{sa}}-\boldsymbol{l_i})}^{(\ )}\ \sum_{j_i=s}^{\boldsymbol{l_{sa}}+s-j_{sa}}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n}\ \sum_{(n_{ik}=\boldsymbol{n}+\mathbb{k}-j_{ik}+1)}^{(n_i-j_{ik}-\mathbb{k}_1+1)}$$

$$\sum_{n_{sa}=\boldsymbol{n}-j^{sa}+1}^{n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2}\ \sum_{(n_s=\boldsymbol{n}-j_i+1)}^{(n_{sa}+j^{sa}-j_i)}$$

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$$\frac{(n_i - n_{ik} - \mathbb{k}_1 - 1)!}{(j_{ik} - 2)! \cdot (n_i - n_{ik} - j_{ik} - \mathbb{k}_1 + 1)!} \cdot$$

$$\frac{(n_{ik} - n_{sa} - 1)!}{(j^{sa} - j_{ik} - 1)! \cdot (n_{ik} + j_{ik} - n_{sa} - j^{sa})!} \cdot$$

$$\frac{(n_{sa} - n_s - 1)!}{(j_i - j^{sa} - 1)! \cdot (n_{sa} + j^{sa} - n_s - \quad)!} \cdot$$

$$\frac{(n_s - 1)!}{(n_s + j_i - \boldsymbol{n} - 1)! \cdot (\boldsymbol{n} - j_i)!} \cdot$$

$$\frac{(\quad - j_{sa}^{ik})!}{(\quad - j_{ik})! \cdot (\quad - j_{sa}^{ik})!} \cdot$$

$$\frac{(\boldsymbol{l_{sa}} + j_{sa}^{ik} - \boldsymbol{l_{ik}} - \quad)!}{(j_{ik} + \boldsymbol{l_{sa}} - j^{sa} - \quad)! \cdot (\quad + j_{sa} - j_{ik} - j_{sa})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + j_i - \quad - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - j_i)!} -$$

$$\sum_{k=1}^{} \sum_{(j_s=1)}^{(\ )}$$

$$\sum_{j_{ik}=j_{sa}^{ik}} \sum_{(j^{sa}=j_{sa})}^{(\ )} \sum_{j_i=s}$$

$$\sum_{n_i=\boldsymbol{n}+\mathbb{k}}^{n} \sum_{(n_{ik}=n_i-j_{ik}-\mathbb{k}_1+1)}^{(\ )}$$

$$\sum_{n_{sa}=n_{ik}+j_{ik}-j^{sa}-\mathbb{k}_2} \sum_{(n_s=n_{sa}+j^{sa}-j_i)}^{(\ )}$$

$$\frac{(n_i + j_{ik} - j_i - \mathbb{k}_1 - \mathbb{k}_2 - j_{sa}^{ik})!}{(n_i - \boldsymbol{n} - \mathbb{k}_1 - \mathbb{k}_2)! \cdot (\boldsymbol{n} + j_{ik} - j_i - j_{sa}^{ik})!} \cdot$$

$$\frac{(D - \boldsymbol{l_i})!}{(D + s - \boldsymbol{n} - \boldsymbol{l_i})! \cdot (\boldsymbol{n} - s)!}$$

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DİZİN

B

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.1.1.1.1/3-4
ilk düzgün simetrik olasılık, 2.3.2.2.1.1.1.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.1.1/4
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.1.1.2.1/3-4
ilk düzgün simetrik olasılık, 2.3.2.2.1.1.2.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.2.1/4
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.1.1.3.1/3-4
ilk düzgün simetrik olasılık, 2.3.2.2.1.1.3.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.3.1/4
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu simetrinin son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.1.1.1.1/153-154
ilk düzgün simetrik olasılık, 2.3.2.2.1.1.1.1/162-163
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.1.1/210
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.1.2.1.1/153-154
ilk düzgün simetrik olasılık, 2.3.2.2.1.1.2.1/162-163
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.2.1/210
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bir bağımsız durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.1.3.1.1/153-154
ilk düzgün simetrik olasılık, 2.3.2.2.1.1.3.1/162-163
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.3.1/210
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.1.4.1.1/3-4
ilk düzgün simetrik olasılık, 2.3.2.2.1.4.1.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.4.1.1/4
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.1.4.2.1/3-4
ilk düzgün simetrik olasılık, 2.3.2.2.1.4.2.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.4.2.1/4
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.1.4.3.1/3-4
ilk düzgün simetrik olasılık, 2.3.2.2.1.4.3.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.4.3.1/4
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu

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simetrinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.1.1.1.1/156-157

ilk düzgün simetrik olasılık, 2.3.2.2.1.1.1.1/165

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.1.1/215

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.1.1.2.1/156-157

ilk düzgün simetrik olasılık, 2.3.2.2.1.1.2.1/165

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.2.1/215

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bir bağımlı-bağımsız durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.1.1.3.1/156-157

ilk ilk düzgün simetrik olasılık, 2.3.2.2.1.1.3.1/165

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.3.1/215

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.1.6.1.1/3-4

ilk düzgün simetrik olasılık, 2.3.2.2.1.6.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.6.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.1.6.2.1/3-4

ilk düzgün simetrik olasılık, 2.3.2.2.1.6.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.1.6.3.1/3-4

ilk düzgün simetrik olasılık, 2.3.2.2.1.6.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.6.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.1.1.1.1/77

ilk düzgün simetrik olasılık, 2.3.2.2.1.1.1.1/61

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.1.1/106

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin durumuna

ilk simetrik olasılık, 2.3.2.1.1.1.2.1/77

ilk düzgün simetrik olasılık, 2.3.2.2.1.1.2.1/61

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.2.1/106

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.1.1.3.1/77

ilk ilk düzgün simetrik olasılık, 2.3.2.2.1.1.3.1/61

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.1.1.3.1/106

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.2.1.1.1/4

ilk düzgün simetrik olasılık, 2.3.2.2.2.1.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.1.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

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ilk simetrik olasılık, 2.3.2.1.2.1.2.1/4
ilk düzgün simetrik olasılık, 2.3.2.2.2.1.2.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.1.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.2.1.3.1/4
ilk düzgün simetrik olasılık, 2.3.2.2.2.1.3.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.1.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.2.2.1.1/5
ilk düzgün simetrik olasılık, 2.3.2.2.2.2.1.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.2.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.2.2.2.1/4
ilk düzgün simetrik olasılık, 2.3.2.2.2.2.2.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.2.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.2.2.3.1/4
ilk düzgün simetrik olasılık, 2.3.2.2.2.2.3.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.2.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.2.4.1.1/4
ilk düzgün simetrik olasılık, 2.3.2.2.2.4.1.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.4.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.2.4.2.1/4
ilk düzgün simetrik olasılık, 2.3.2.2.2.4.2.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.4.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.2.4.3.1/4
ilk düzgün simetrik olasılık, 2.3.2.2.2.4.3.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.4.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.2.6.1.1/4
ilk düzgün simetrik olasılık, 2.3.2.2.2.6.1.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.6.1.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.2.6.2.1/4
ilk düzgün simetrik olasılık, 2.3.2.2.2.6.2.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.6.2.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre

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ilk simetrik olasılık, 2.3.2.1.2.6.3.1/4
ilk düzgün simetrik olasılık, 2.3.2.2.2.6.3.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.6.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.2.7.1.1/5
ilk düzgün simetrik olasılık, 2.3.2.2.2.7.1.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.7.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.2.7.2.1/5
ilk düzgün simetrik olasılık, 2.3.2.2.2.7.2.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.7.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.2.7.3.1/4
ilk düzgün simetrik olasılık, 2.3.2.2.2.7.3.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.2.7.3.1/4

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.3.1.1.1/4
ilk düzgün simetrik olasılık, 2.3.2.2.3.2.1.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.3.1.1.1/4-5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.3.1.2.1/4
ilk düzgün simetrik olasılık, 2.3.2.2.3.2.2.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.3.1.2.1/4-5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.3.1.3.1/4
ilk düzgün simetrik olasılık, 2.3.2.2.3.2.3.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.3.1.3.1/4-5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımlı durumlu simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.3.2.1.1/5
ilk düzgün simetrik olasılık, 2.3.2.2.3.2.1.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.3.2.1.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.3.2.2.1/5
ilk düzgün simetrik olasılık, 2.3.2.2.3.2.2.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.3.2.2.1/5-6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımlı durumlu bağımlı simetrinin ilk ve herhangi bir durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.3.2.3.1/4
ilk düzgün simetrik olasılık, 2.3.2.2.3.2.3.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.3.2.3.1/4-5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin herhangi iki durumuna bağlı

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ilk simetrik olasılık, 2.3.2.1.4.1.1.1/4
ilk düzgün simetrik olasılık, 2.3.2.2.4.1.1.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.4.1.1.1/5
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin herhangi iki durumuna bağlı
ilk simetrik olasılık, 2.3.2.1.4.1.2.1/4
ilk düzgün simetrik olasılık, 2.3.2.2.4.1.2.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.4.1.2.1/5
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin herhangi iki durumuna bağlı
ilk simetrik olasılık, 2.3.2.1.4.1.3.1/4
ilk düzgün simetrik olasılık, 2.3.2.2.4.1.3.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.4.1.3.1/5
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.4.1.1.1/701-702
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.4.1.2.1/701-702
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.4.1.3.1/701-702
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.5.1.1.1/5
ilk düzgün simetrik olasılık, 2.3.2.2.5.1.1.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.1.1.1/6
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.5.1.2.1/5
ilk düzgün simetrik olasılık, 2.3.2.2.5.1.2.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.1.2.1/6
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.5.1.3.1/5
ilk düzgün simetrik olasılık, 2.3.2.2.5.1.3.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.1.3.1/6
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.5.2.1.1/6-7
ilk düzgün simetrik olasılık, 2.3.2.2.5.2.1.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.2.1.1/8
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.5.2.2.1/6-7
ilk düzgün simetrik olasılık, 2.3.2.2.5.2.2.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.2.2.1/8
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.5.2.3.1/5
ilk düzgün simetrik olasılık, 2.3.2.2.5.2.3.1/3-4

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ilk düzgün olmayan simetrik olasılık, 2.3.2.3.5.2.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

ilk simetrik olasılık, 2.3.2.1.8.1.1.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.1.1.1/5

dizilimsiz bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

ilk simetrik olasılık, 2.3.2.1.8.1.2.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.1.2.1/5

dizilimsiz bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

ilk simetrik olasılık, 2.3.2.1.8.1.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.1.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

ilk simetrik olasılık, 2.3.2.1.8.2.1.1/6-7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.2.1.1/6-7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

ilk simetrik olasılık, 2.3.2.1.8.2.2.1/6-7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.2.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk ve herhangi iki durumunun bulunabileceği olaylara göre herhangi iki duruma bağlı

ilk simetrik olasılık, 2.3.2.1.8.2.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.8.2.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.1.1.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.6.1.1.1/5-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.1.1.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.1.2.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.6.1.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.1.2.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.1.3.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.6.1.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.1.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.2.1.1/6

ilk düzgün simetrik olasılık, 2.3.2.2.6.2.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.2.1.1/8

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.6.2.2.1/6

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ilk düzgün simetrik olasılık, 2.3.2.2.6.2.2.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.2.2.1/8
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.6.2.3.1/4-5
ilk düzgün simetrik olasılık, 2.3.2.2.6.2.3.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.2.3.1/5
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.6.4.1.1/5
ilk düzgün simetrik olasılık, 2.3.2.2.6.4.1.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.4.1.1/5
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.6.4.2.1/5
ilk düzgün simetrik olasılık, 2.3.2.2.6.4.2.1/4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.4.2.1/5
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.6.4.3.1/5
ilk düzgün simetrik olasılık, 2.3.2.2.6.4.3.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.4.3.1/5
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.6.6.1.1/5
ilk düzgün simetrik olasılık, 2.3.2.2.6.6.1.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.6.1.1/5
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.6.6.2.1/5
ilk düzgün simetrik olasılık, 2.3.2.2.6.6.2.1/4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.6.2.1/5
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.6.6.3.1/5
ilk düzgün simetrik olasılık, 2.3.2.2.6.6.3.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.6.3.1/5
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.6.7.1.1/6
ilk düzgün simetrik olasılık, 2.3.2.2.6.7.1.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.7.1.1/8
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.6.7.2.1/6
ilk düzgün simetrik olasılık, 2.3.2.2.6.7.2.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.7.2.1/8
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.6.7.3.1/4-5

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ilk düzgün simetrik olasılık, 2.3.2.2.6.7.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.6.7.3.1/5

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

ilk simetrik olasılık, 2.3.2.1.9.1.1.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.1.1.1/5

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

ilk simetrik olasılık, 2.3.2.1.9.1.2.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.1.2.1/5

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

ilk simetrik olasılık, 2.3.2.1.9.1.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.1.3.1/5

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık, 2.3.2.1.9.2.1.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.2.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık, 2.3.2.1.9.2.2.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.2.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık, 2.3.2.1.9.2.3.1/4-5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.2.3.1/6

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

ilk simetrik olasılık, 2.3.2.1.9.4.1.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.4.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

ilk simetrik olasılık, 2.3.2.1.9.4.2.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.4.2.1/7

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

ilk simetrik olasılık, 2.3.2.1.9.4.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.4.3.1/7

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

ilk simetrik olasılık, 2.3.2.1.9.6.1.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.6.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı

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ilk simetrik olasılık, 2.3.2.1.9.6.2.1/5
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.6.2.1/7
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
ilk simetrik olasılık, 2.3.2.1.9.6.3.1/5
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.6.3.1/7
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
ilk simetrik olasılık, 2.3.2.1.9.7.1.1/6
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.7.1.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımsız simetrinin ilk herhangi bir ve son durumunun bulunabileceği olaylara göre herhangi bir ve son duruma bağlı
ilk simetrik olasılık, 2.3.2.1.9.7.2.1/6
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.7.2.1/7
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
ilk simetrik olasılık, 2.3.2.1.9.7.3.1/4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.9.7.3.1/5
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.7.1.1.1/5
ilk düzgün simetrik olasılık, 2.3.2.2.7.1.1.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.1.1.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.7.1.2.1/5
ilk düzgün simetrik olasılık, 2.3.2.2.7.1.2.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.1.2.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.7.1.3.1/5
ilk düzgün simetrik olasılık, 2.3.2.2.7.1.3.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.1.3.1/7
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.7.2.1.1/7
ilk düzgün simetrik olasılık, 2.3.2.2.7.2.1.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.2.1.1/10-11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.7.2.2.1/7
ilk düzgün simetrik olasılık, 2.3.2.2.7.2.2.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.2.2.1/10-11
Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre
ilk simetrik olasılık, 2.3.2.1.7.2.3.1/5
ilk düzgün simetrik olasılık, 2.3.2.2.7.2.3.1/3-4
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.2.3.1/7

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Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.4.1.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.4.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.4.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.4.2.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.4.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.4.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bir bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.4.3.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.4.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.4.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.6.1.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.6.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.6.1.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımsız simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.6.2.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.6.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.6.2.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımlı-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.6.3.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.6.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.6.3.1/7

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.7.1.1/7

ilk düzgün simetrik olasılık, 2.3.2.2.7.7.1.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.7.1.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.7.2.1/7

ilk düzgün simetrik olasılık, 2.3.2.2.7.7.2.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.7.2.1/10-11

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımsız durumlu bağımlı simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre

ilk simetrik olasılık, 2.3.2.1.7.7.3.1/5

ilk düzgün simetrik olasılık, 2.3.2.2.7.7.3.1/3-4

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.7.7.3.1/7

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

ilk simetrik olasılık, 2.3.2.1.10.1.1.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.1.1.1/5-6

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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
ilk simetrik olasılık, 2.3.2.1.10.1.2.1/5
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.1.2.1/5-6
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
ilk simetrik olasılık, 2.3.2.1.10.1.3.1/5
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.1.3.1/5-6
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
ilk simetrik olasılık, 2.3.2.1.10.2.1.1/7
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.2.1.1/7-8
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
ilk simetrik olasılık, 2.3.2.1.10.2.2.1/7
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.2.2.1/7-8
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
ilk simetrik olasılık, 2.3.2.1.10.2.3.1/5
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.2.3.1/5-6
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
ilk simetrik olasılık, 2.3.2.1.10.4.1.1/5
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.4.1.1/7-8
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
ilk simetrik olasılık, 2.3.2.1.10.4.2.1/5
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.4.2.1/7-8
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
ilk simetrik olasılık, 2.3.2.1.10.4.3.1/5
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.4.3.1/7-8
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
ilk simetrik olasılık, 2.3.2.1.10.6.1.1/5
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.6.1.1/7-8
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
ilk simetrik olasılık, 2.3.2.1.10.6.2.1/5
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.6.2.1/7-8
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
ilk simetrik olasılık, 2.3.2.1.10.6.3.1/5
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.6.3.1/7-8

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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

ilk simetrik olasılık, 2.3.2.1.10.7.1.1/7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.7.1.1/7-8

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

ilk simetrik olasılık, 2.3.2.1.10.7.2.1/7

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.7.2.1/7-8

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

ilk simetrik olasılık, 2.3.2.1.10.7.3.1/5

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.10.7.3.1/5-6

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

ilk simetrik olasılık, 2.3.2.1.11.1.1.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.1.1.1/6

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

ilk simetrik olasılık, 2.3.2.1.11.1.2.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.1.2.1/6

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

ilk simetrik olasılık, 2.3.2.1.11.1.3.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.1.3.1/6

Bağımlı ve bir bağımsız olasılıklı farklı dizilimsiz bağımsız-bağımlı durumlu simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre herhangi iki ve son durumuna bağlı

ilk simetrik olasılık, 2.3.2.1.11.2.1.1/8-9

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.2.1.1/9

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

ilk simetrik olasılık, 2.3.2.1.11.2.2.1/8

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.2.2.1/9

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

ilk simetrik olasılık, 2.3.2.1.11.2.3.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.2.3.1/6

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

ilk simetrik olasılık, 2.3.2.1.11.4.1.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.4.1.1/9

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

ilk simetrik olasılık, 2.3.2.1.11.4.2.1/6

ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.4.2.1/9

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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
ilk simetrik olasılık, 2.3.2.1.11.4.3.1/6
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.4.3.1/9

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
ilk simetrik olasılık, 2.3.2.1.11.6.1.1/6
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.6.1.1/9

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
ilk simetrik olasılık, 2.3.2.1.11.6.2.1/6
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.6.2.1/9

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
ilk simetrik olasılık, 2.3.2.1.11.6.3.1/6
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.6.3.1/9

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
ilk simetrik olasılık, 2.3.2.1.11.7.1.1/8-9
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.7.1.1/9

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
ilk simetrik olasılık, 2.3.2.1.11.7.2.1/8-9
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.7.2.1/9

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
ilk simetrik olasılık, 2.3.2.1.11.7.3.1/6
ilk düzgün olmayan simetrik olasılık, 2.3.2.3.11.7.3.1/6

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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 olan ve bağımlı olasılıklı dağılımın ilk bağımlı durumuyla başlayan dağılımlarda, simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk 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 ilk 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 olan ve bağımlı olasılıklı dağılımın ilk bağımlı durumuyla başlayan dağılımlarda, simetrinin ilk herhangi iki ve son durumunun bulunabileceği olaylara göre ilk düzgün olmayan simetrik olasılığın, tanım ve eşitlikleri verilmektedir.

VDOİHİ'nin diğer ciltlerinde olduğu gibi bu ciltte verilen 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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